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(54) Title: MODIFIED DEACETOXYCEPHALOSPORIN C SYNTHASE (DAOCS) AND X–RAY STRUCTURE

(57) Abstract

Three–dimensional crystal structure(s) of deacetoxycephalosporin C synthase (DAOCS) are described. The X–ray co–ordinates provide precise 3–dimensional information of amino acids within the structure of DAOCS. Some of these are in complexes with iron and/or substrates. Information from the structures is used to modify enzymes of the cephalosporin biosynthesis pathway including DAOCS, deacetylcephalosporin C synthase DAOC/DACS, such that they accept unnatural substrates (e.g. penicillins G, V) in order to improve the production of beta–lactam antibiotics. The structures may be used to predict the structures of other 2–oxoglutarate dependent enzymes, thereby allowing the design of inhibitors, and new catalysts for the production of e.g. oxidised amino acids/peptides. Specific modifications of amino acid residues are proposed and exemplified.

U.S. Patent Application No. 10/719,236
Attorney Docket No. 6653-019-999
Reference AN

MODIFIED DEACETOXYCEPHALOSPORIN C SYNTHASE (DAOCS) AND X-RAY STRUCTURE

5   Penicillin and cephalosporin antibiotics are produced either directly by fermentation or by modification of fermentation derived materials containing a beta-lactam ring. The biosynthetic pathway to the penicillins and cephalosporins has been extensively studied and reviewed (J. E. Baldwin and C. J. Schofield, in 'The Chemistry of β-lactams (Ed. M. I.

10   Page), Chapter 1, Blackie, London 1992; Ingolia and Queener, Med. Res. Rev., 1989, 9, 245-264; Aharonowitz, Cohen and Martin, Ann. Rev. Microbiol., 1992, 46, 461-495; Schofield, Bycroft, Baldwin, Hadju, Roach, Current Opinion in Structural Biology, 1997, 7, 857-864) and includes the following steps (Figure 1):

15   1.   Conversion of the tripeptide: L-δ-α-aminoadipoyl-L-cysteinyl-D-valine (ACV) to isopenicillin N in a step catalysed by isopenicillin N synthase (IPNS). This step is common to both penicillin and cephalosporin biosynthesis.

      2.   In some organisms (e.g. Penicillium chrysogenum and

20   Aspergillus nidulans) isopenicillin N is converted by exchange of its L-δ-α-aminoadipoyl side chain to penicillins with other side chains, which are normally more hydrophobic than the side chain of isopenicillin N. This conversion is catalysed by an amidohydrolase/ acyltransferase enzyme. Examples of penicillins produced by this biosynthetic process include

25   penicillin G (which has a phenylacetyl side chain) and penicillin V (which has a phenoxyacetyl side chain). These hydrophobic penicillins may be commercially produced via fermentation under the appropriate conditions.

      3.   In other organisms (e.g. Streptomyces clavuligerus and Cephalosporium acremonium) isopenicillin N is epimerised to penicillin N.

30   This reaction is catalysed by an epimerase enzyme.

4.   In some organisms (e.g. *S. clavuligerus* and *C. acremonium*) penicillin N is converted to DAOC. This reaction is catalysed by deacetoxycephalosporin C synthase (DAOCS) in some organisms (e.g. *Streptomyces clavuligerus*) and by deacetoxy/deacetylcephalosporin C synthase (DAOC/DACS) in others (e.g. *C. acremonium*).

5.   In some organisms (e.g. *S. clavuligerus* and *C. acremonium*) DAOC is converted to deacetylcephalosporin C (DAC). This reaction is catalysed by deacetylcephalosporin C synthase (DACS) in some organisms (e.g. *S. clavuligerus*) and by deacetoxy/deacetylcephalosporin C synthase (DAOC/DACS) in others (e.g. *C. acremonium*).

Further biosynthetic steps to give other cephalosporin derivatives may also occur, e.g. in *C. acremonium* DAC may be converted to cephalosporin C and in *Streptomyces spp.* DAC may be converted to cephamycin C. The genes encoding for each of the enzymes catalysing steps 1-6 above have been identified and sequenced.

Fermented penicillins, cephalosporins and their biosynthetic intermediates are useful as antibiotics or as intermediates in the production of antibiotics. Penicillins with hydrophobic side chains may be used for the preparation of cephalosporins or intermediates used in the preparation of cephalosporins, e.g. penicillins (including penicillin G and penicillin V) may be used to prepare C-3 exomethylene cephams which may be used as intermediates in the preparation of the commercial antibiotics, e.g. Cefachlor.

The enzymes IPNS, DAOCS, DACS and DAOC/DACS are members of an extended family of Fe(II) utilising oxidase and oxygenase enzymes. Most of this family (including DAOCS, DACS and DAOC/DACS) utilise a 2-oxo acid (normally 2-oxoglutarate) as a cosubstrate in addition to dioxygen and the 'prime' substrate (e.g. penicillin N in the case of DAOCS). Since IPNS, does not use 2-oxoglutarate, it has a substantially different mechanism to the 2-oxoglutarate dependent oxygenases, and this gives

rise to a significantly different active site.

The Invention

This invention is based on the determination of the three
dimensional crystal structure of DAOCS and the information and
developments which come from it. The X-ray co-ordinates provide very
detailed 3-dimensional information on the relationships between amino
acid residues in the structure of DAOCS and on the binding modes of the
Fe-cofactor and the substrates to DAOCS. The structure allows the
modification of DAOCS and related enzymes of penicillin and
cephalosporin biosynthesis (including DACS and DAOC/DACS) in order to
alter their substrate and product selectivities. Since the DAOCS structures
are the first from the family of 2-oxoglutarate dependent dioxygenases they
also allow for the design of new inhibitors of this family of enzymes.
Previously partial overviews of the structures of IPNS complexed to
manganese and IPNS complexed to iron and ACV were reported (Roach
et al., Nature, 1995, 375, 700-704; Roach *et al.*, Nature, 1997, 387, 827).
The structures, as defined by their X-ray co-ordinates, of IPNS complexed
to manganese and in complexes with iron, ACV and/or substrate
analogues have been reported in Baldwin, Hajdu, Roach, Hensgens,
Clifton, GB 9621486.1- (Oxygenase Enzymes and Method).

Procedures have been developed for the production of 7-
aminodeacetoxycephaosporin C (7-ADCA) in which recombinant *P.
chrysogenum* strains into which the DAOCS gene has been introduced are
used for the production of cephalosporins. In particular if adipic acid is
added to these recombinant strains adipoyl-6-APA is produced, which is
converted by DAOCS into adipoyl-7-ADCA from which the adipoyl side
chain can be removed (EPA-A-0532341, Shibata *et al.*, Bioorg. Med.
Chem. Letts, 1996, 6, 1579-1584).

The IPNS gene sequence (and therefore the amino acid

sequence) is related but significantly different to those of DAOCS, DACS, DAOC/DACS. It is likely that gross elements of the fold (i.e. significant elements within the 3-dimensional structure) of these enzymes will be conserved but that the active site architecture will be very significantly different. Structural elements conserved are likely to include the beta-barrel 'jelly roll' core and certain alpha-helices (including alpha helix-10, as defined in Roach et al., Nature, 1995, 375, 700-704). The degree of similarity is insufficient to define the precise structure of DAOCS, DACS, or DAOC/DACS from the IPNS structures. To date no models of DAOCS, DACS, or DAOC/DACS based on the IPNS structure have been reported. Nor have any detailed studies on substrate binding of these enzymes been reported. One report (WO 97/20053) claims the use of products resulting from modification of certain residues in DAOCS for the improved conversion of penicillin G to phenyl acetyl (G)-7-aminocephalosporanic acid.

The three-dimensional structure of DAOCS is defined by the X-ray co-ordinates set out below (Structure A).

Also set out below is a high resolution crystal structure of a complex of prokaryotic DAOCS from S. clavuligerus with Fe(II) and 2-oxoglutarate (Structure B).

In part the present invention relates to the use of the structures of DAOCS in order to make modifications to it or DACS or DAOC/DACS in order that the modified enzymes catalyse the conversion of unnatural penicillins (e.g. penicillin G and penicillin V) to cephalosporins more efficiently than the wild-type enzyme. Further aspects of the invention relate to the use of the DAOCS structure in order to produce unnatural products in micro-organisms. Such products include exomethylene cephalosporins, with or without alpha-aminoadipoyl or hydrophobic side chain (e.g. phenylacetyl or phenoxyacetyl). Thus one aspect of this invention refers to the use of the structure of DAOCS for modifying DAOCS

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(or the closely related enzymes DACS or DAOC/DACS) in order to:

(i)   permit the enzyme to accept (or accept more efficiently) unnatural penicillin substrates for the preparation of new or commercially valuable antibacterial materials.

5   (ii)   enable the modified enzyme to produce unnatural (e.g. exomethylene cephams) or optimise the production of minor products (e.g. 3-β-hydroxycephams) for use as antibacterials or as intermediates in the preparation of antibacterials or commercially valuable compounds.

In another aspect this invention provides modified enzymes

10   that result from application of the aforementioned techniques. These are enzymes having significant (as defined below) sequence and thus structural similarity with DAOCS. Thus, structures of these enzymes may be predicted on the basis of the DAOCS structures. Preferably there will be sequence similarity/identity between most of the modified enzyme and a

15   major part of DAOCS. Previous sequence comparisons (Roach et al., Nature, 1995, 375, 700), using pairwise comparisons of the sequences followed by single linkage cluster analysis show that IPNS, DAOCS, DACS and DAOC/DACS cluster with standard deviations scores of >5.0 (Barton and Sternberg, J. Mol. Biol., 1987, 198, 327). Scores over 5.0 and

20   preferably over 6.0 indicate that the sequence alignments will be correct within all or most of the protein secondary structural elements (Barton, Methods in Enzymol., 1990, 183, 403); thus they have significantly similar sequences and hence structures. Note there are other criteria which may be used to ascertain significant sequence similarity for example % identity

25   or % similarity of amino acids possessing side chains with similar physico-chemical properties (Barton and Sternberg, J. Mol. Biol., 1987, 198, 327). Thus, on the basis of sequence comparisons it is possible to predict the structure of one enzyme (e.g. DACS or DAOC/DACS) from another closely related enzyme (e.g. DAOCS). Further, it is recognised that although two

30   enzymes may have structures in which secondary structural elements are

largely or wholly conserved, differences in the structures of the two enzymes may result from the side chains of the amino acids forming the secondary structural elements. The effect of these differences, which alter the substrate/product selectivities of the compared enzymes, is predictable once the three-dimensional structure of one of the enzymes is known.

In another aspect the invention provides an enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the side chain binding site of penicillin N or DAOC is modified and at at least one of the following sites at least one amino acid residue is changed to another amino acid residue or is deleted: Thr72, Arg74, Arg75, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301, Tyr302, Val303, Asn304; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

Modifications of this kind will permit the expansion of penicillin V or penicillin G to the corresponding cephalosporins. To achieve this it is desirable to increase the kcat/Km for the mutant as compared to the wild type DAOCS. Kinetic results indicate that apparent kcat values for penicillin N and penicillin G are similar but that Km is much higher for penicillin G. Thus based on these analysis, a decrease in the binding constant of DAOCS for penicillin G should make it possible to increase kcat/Km for penicillin G.

The side chain binding pocket of DAOCS is made of residues from different parts of the peptide chain, so it is likely that more than one residue will have to be altered to make a better penicillin G/V expander. Nevertheless some residues are more important than others. Examination of the interactions between the last few C-terminal residues (Thr-308 to Ala-311) of one DAOCS molecule and the active site of another in the crystal structure, suggests a binding mode for the penicillin nucleus which

is shown in Figure 2 of the accompanying drawings. The penam C-3 carboxylate group probably occupies an analogous position to that of Ala-311 from a symmetry related molecule in the active site, forming electrostatic interactions with Arg-162 and Arg-160. The side chain of Arg-160 may also form a hydrogen bonding interaction with the β-lactam carbonyl.

It needs to be borne in mind that protein specificity is generally controlled by more than one amino acid. To alter the specificity of a protein in a major way is likely to require more than one of the mutational changes suggested below, although each of the mutations will contribute. With this in mind, preferred residues to modify for the expansion of a penicillin are as follows:

a)   Arg-266. This residue binds with the α-aminoadipate side chain of the natural substrate and should be changed to a residue of more hydrophobic character, e.g. Phe, Ala, Val, Leu, Ile.

b)   Thr-72. This should be changed to a hydrophobic residue e.g. Val, Leu, Ile, Phe, Ala, to help bind the hydrophobic side chain of penicillin G. It should be effective in combination with other mutants.

c)   Arg-74 may be usefully changed to a neutral or hydrophobic residue (Phe, Tyr, Val, Leu, Ile, Ala). Modification of Arg-75 may be necessary in addition because it forms a hydrogen-bonding network with Arg-74.

d)   Glu-156. This residue binds with the α-aminoadipate side chain. It should be changed to one of Ala, Val, Leu, Ile, Phe, Tyr, Trp, Asn, Gln, Ser.

e)   The side chains of Leu-158, Asn-301 and Tyr-302 form part of the binding pocket for the penicillin side chain and can be usefully modified to more hydrophobic character.

f)   Asn-304. This residue binds the amide linking the side chain to the penam nucleus. Modification is effected to expand penicillins with shortened or no side chains (e.g. to Asp or Glu for 6-Apa).

Note that other changes may be used to construct part or all of a side chain binding pocket via hydrogen bonding or other interactions.

The insertion or deletion of residues into the DAOCS sequence may also be of use in constructing a hydrophobic binding pocket for the penicillin side chain. Insertion of hydrophobic residues into the C-terminal region (residue 300-311 and in particular 301-303) may assist in the construction of a hydrophobic binding pocket for penicillin side chains.

In another aspect the invention provides an enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the penicillin/cephalosporin binding site of penicillin N or DAOC is modified and at at least one of the following amino acid residues is changed or deleted: Ile88, Arg160, Arg162, Phe164, Met180, Thr190, Ile192, Phe225, Pro241, Val245, Val262, Phe264, Asn304, Ile305, Arg306, Arg307; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

Further discussion of this aspect may be found in Nature Volume 394, pages 805-809 published on 20 August 1998 and incorporated by reference herein.

Another aspect of the invention refers to the use of the structure of DAOCS in order to modify its active site (or that of a structurally related 2-oxoglutarate dependent dioxygenase) in order that the modified enzyme accepts non beta lactam substrates in order to produce oxidised compounds of value. Oxidised amino acids (e.g. 4-hydroxyprolines, hydroxylysines, hydroxyaspartic acids and others) are useful as synthetic intermediates in the production of valuable materials. Using the structure of DAOCS specific residues can be targeted for modification in order that the modified enzyme can be used to produce oxidised amino acids or peptides. The process may include modification of the following residues:

Arg74, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301, Tyr302, Val303, Asn304, Ile88, Arg162, Phe164, Met180, Thr190, Ile192, Pro241, Val245, Val262, Ile305, Arg306, Arg307.

5   Another aspect of the invention refers to the use of the DAOCS structure for the design of selective inhibitors of 2-oxoglutarate dependent dioxygenases. The 2-oxoglutarate dependent dioxygenase prolyl 4-hydroxylase has been the target of inhibition in order to provide a therapeutic treatment for fibrotic diseases (e.g. liver cirrhosis, arthritis).

10   However, no inhibitors are in clinical use, probably because it is difficult to achieve selective inhibition of the target enzyme for inhibition over other enzymes (including 2-oxoglutarate dependent enzymes). The structure of DAOCS provides a template for the design of inhibitors of 2-oxoglutarate dependent dioxygenases.

15   Set out below are two high resolution crystal structures for DAOCS from *S. clavuligerus:* the structure of the iron-free apoenzyme (Structure A) and the structure of the complex with Fe(II) and 2-oxoglutarate (Structure B). The results imply a mechanism by which the enzyme-Fe(II) complex reacts with 2-oxoglutarate and dioxygen to give the

20   reactive ferryl species, a process common to many non-haem oxygenases. Other notable 2-oxoacid-dependent ferrous enzymes are prolyl hydroxylase, involved in collagen biosynthesis, gibberellin 3β-hydroxylase, a mutation of which influences stem length in plants, and clavaminic acid synthase, involved in the biosynthesis of the β-lactamase inhibitor,

25   clavulanic acid. Within the family of 2-oxoacid-dependent enzymes, DAOCS belongs to a sub-family, the members of which show sequence similarity with IPNS and 1-aminocyclopropane-1-carboxylate oxidase (the ethylene forming enzyme), enzymes that do not use a 2-oxoacid in catalysis.

30   The iron-free form of DAOCS crystallises in space group R3

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as a crystallographic trimer. The main chain of the protein folds into a conserved jelly roll core with flanking helices.

Co-ordinates and structure factors have been deposited with the Protein Data Bank (entries 1rxg, and r1rxgsf for the
5   Fe(II)-2-oxoglutarate complex).

LEGENDS TO FIGURES.

Figure 1: the biosynthetic pathway to the penicillins and cephalosporins.
10   Figure 2 is a view of the active site of DAOCS showing 2-oxoglutarate binding to the iron and proposed penicillin N binding. Interactions with the side chains of certain amino acid residues are indicated by arrows.

Structure A is a three-dimensional structure of DAOCS.
15   Structure B is a high resolution crystal structure for prokaryotic DAOCS from *S. clavuligerus* as a complex with Fe(II) and 2-oxoglutarate.

The peptide sequence of DAOCS (with the numbering used herein) is set out below:

Met	Asp	Thr	Thr	Val	Pro	Thr	Phe	Ser	Leu	10
Ala	Glu	Leu	Gln	Gln	Gly	Leu	His	Gln	Asp	20
Glu	Phe	Arg	Arg	Cys	Leu	Arg	Asp	Lys	Gly	30
Leu	Phe	Tyr	Leu	Thr	Asp	Cys	Gly	Leu	Thr	40
Asp	Thr	Glu	Leu	Lys	Ser	Ala	Lys	Asp	Leu	50
Val	Ile	Asp	Phe	Phe	Glu	His	Gly	Ser	Glu	60
Ala	Glu	Lys	Arg	Ala	Val	Thr	Ser	Pro	Val	70
Pro	Thr	Met	Arg	Arg	Gly	Phe	Thr	Gly	Leu	80
Glu	Ser	Glu	Ser	Thr	Ala	Gln	Ile	Thr	Asn	90
Thr	Gly	Ser	Tyr	Ser	Asp	Tyr	Ser	Met	Cys	100
Tyr	Ser	Met	Gly	Thr	Ala	Asp	Asn	Leu	Phe	110
Pro	Ser	Gly	Asp	Phe	Gly	Arg	Ile	Trp	Thr	120
Gln	Tyr	Phe	Asp	Arg	Gln	Tyr	Thr	Ala	Ser	130
Arg	Ala	Val	Ala	Arg	Glu	Val	Leu	Arg	Ala	140
Thr	Gly	Thr	Glu	Pro	Asp	Gly	Gly	Val	Glu	150
Ala	Phe	Leu	Asp	Cys	Glu	Pro	Leu	Leu	Arg	160
Phe	Arg	Tyr	Phe	Pro	Gln	Val	Pro	Glu	His	170
Arg	Ser	Ala	Glu	Glu	Gln	Pro	Leu	Arg	Met	180
Ala	Pro	His	Tyr	Asp	Leu	Ser	Met	Val	Thr	190
Leu	Ile	Gln	Gln	Thr	Pro	Cys	Ala	Asn	Gly	200
Phe	Val	Ser	Leu	Gln	Ala	Glu	Val	Gly	Gly	210
Ala	Phe	Thr	Asp	Leu	Pro	Tyr	Arg	Pro	Asp	220
Ala	Val	Leu	Val	Phe	Cys	Gly	Ala	Ile	Ala	230
Thr	Leu	Val	Thr	Gly	Gly	Gln	Val	Lys	Ala	240
Pro	Arg	His	His	Val	Ala	Ala	Pro	Arg	Arg	250
Asp	Gln	Ile	Ala	Gly	Ser	Ser	Arg	Thr	Ser	260
Ser	Val	Phe	Phe	Leu	Arg	Pro	Asn	Ala	Asp	270
Phe	Thr	Phe	Ser	Val	Pro	Leu	Ala	Arg	Glu	280
Cys	Gly	Phe	Asp	Val	Ser	Leu	Asp	Gly	Glu	290
Thr	Ala	Thr	Phe	Gln	Asp	Trp	Ile	Gly	Gly	300
Asn	Tyr	Val	Asn	Ile	Arg	Arg	Thr	Ser	Lys	310
Ala										311

STRUCTURE A

CRYST1	106.400	106.400	71.100	90.00	90.00	120.00
SCALE1	0.009398	0.005426	0.000000	0.000000		
SCALE2	0.000000	0.010852	0.000000	0.000000		
SCALE3	0.000000	0.000000	0.014065	0.000000		

```
ATOM     1    N   AMET 1    31.434  10.641  59.873 0.542 44.31
ANISOU   1    N   AMET 1    8315    2319    6203    -614  -3454  -791
ATOM     2    CA  AMET 1    30.985  11.769  59.065 0.542 39.90
ANISOU   2    CA  AMET 1    9037    3006    3117    -786  -1026  -296
ATOM     3    C   AMET 1    30.472  12.900  59.956 0.542 28.97
ANISOU   3    C   AMET 1    4807    3113    3086    -421  -2189  -119
ATOM     4    O   AMET 1    29.961  12.670  61.055 0.542 28.12
ANISOU   4    O   AMET 1    3925    2381    4377    -402  -1097   7 4
ATOM     5    CB  AMET 1    29.970  11.328  58.023 0.542 34.85
ANISOU   5    CB  AMET 1    7877    3692    1672     30    -91   -373
ATOM     6    CG  AMET 1    28.626  12.015  57.903 0.542 38.19
ANISOU   6    CG  AMET 1    7367    4873    2270     133   912   -1765
ATOM     7    SD  AMET 1    27.564  11.232  56.654 0.542 47.19
ANISOU   7    SD  AMET 1    6146    7957    3827    -2344 1050  -1326
ATOM     8    CE  AMET 1    28.129  11.973  55.135 0.542 27.10
ANISOU   8    CE  AMET 1    5030    2111    3155    2345  -1467  - 9
ATOM     9    N   AASP 2    30.592  14.105  59.425 0.268 30.20
ANISOU   9    N   AASP 2    4674    3022    3777    -1210 -782  -383
ATOM    10    CA  AASP 2    29.993  15.322  59.963 0.268 34.22
ANISOU  10    CA  AASP 2    5567    2803    4633    -1106 -964  -525
ATOM    11    C   AASP 2    28.494  15.268  59.655 0.268 33.34
ANISOU  11    C   AASP 2    5665    1997    5006    -314  -1457  877
ATOM    12    O   AASP 2    28.099  15.650  58.551 0.268 44.76
ANISOU  12    O   AASP 2    6859    5248    4901    -1023 -1582  1631
ATOM    13    CB  AASP 2    30.629  16.528  59.281 0.268 25.98
ANISOU  13    CB  AASP 2    4424    3085    2361     322  -1794  582
ATOM    14    CG  AASP 2    29.978  17.862  59.553 0.268 38.05
ANISOU  14    CG  AASP 2    6456    2611    5389    -501  -608  -1114
ATOM    15    OD1 AASP 2    28.995  17.937  60.318 0.268 42.35
ANISOU  15    OD1 AASP 2    6406    504  9179    873   920 1991
ATOM    16    OD2 AASP 2    30.449  18.885  58.997 0.268 28.59
ANISOU  16    OD2 AASP 2    1619    2901    6341     790  -1022  -253
ATOM    17    N   BMET 1    32.709  12.640  58.544 0.458 29.49
ANISOU  17    N   BMET 1    4552    2218    4435    -105  1580  477
ATOM    18    CA  BMET 1    31.874  13.050  57.425 0.458 40.62
ANISOU  18    CA  BMET 1    4228    4809    6395     580   210   103
ATOM    19    C   BMET 1    30.884  14.113  57.894 0.458 38.21
ANISOU  19    C   BMET 1    5082    3637    5797     282  -909  -915
ATOM    20    O   BMET 1    30.075  14.599  57.110 0.458 44.81
ANISOU  20    O   BMET 1    8292    3208    5525    2071  -656  - 12
ATOM    21    CB  BMET 1    31.131  11.857  56.829 0.458 33.14
ANISOU  21    CB  BMET 1    4866    2613    5114    2013  -122 818
ATOM    22    CG  BMET 1    29.625  11.840  56.968 0.458 40.28
ANISOU  22    CG  BMET 1    4795    5740    4768     230  -751 5 3
ATOM    23    SD  BMET 1    28.761  11.495  55.422 0.458 34.23
ANISOU  23    SD  BMET 1    5619    3819    3566    2050  -215 2 0
ATOM    24    CE  BMET 1    29.953  12.079  54.222 0.458 54.24
ANISOU  24    CE  BMET 1    10672   4519    5420    1149  4083  -2463
ATOM    25    N   BASP 2    30.914  14.381  59.194 0.732 37.72
ANISOU  25    N   BASP 2    4433    3914    5984    -1323 -1208 -1385
ATOM    26    CA  BASP 2    29.979  15.308  59.811 0.732 35.78
ANISOU  26    CA  BASP 2    5412    3387    4794    -1064 -1050 -795
ATOM    27    C   BASP 2    28.536  14.886  59.567 0.732 29.66
ANISOU  27    C   BASP 2    4876    1624    4771     27   -1561 1218
ATOM    28    O   BASP 2    28.181  14.602  58.414 0.732 34.65
ANISOU  28    O   BASP 2    4375    3689    5100     65   -1485 247
ATOM    29    CB  BASP 2    30.195  16.696  59.181 0.732 37.39
ANISOU  29    CB  BASP 2    6632    3351    4222    -1850 869   -1518
ATOM    30    CG  BASP 2    29.562  17.730  60.104 0.732 30.38
ANISOU  30    CG  BASP 2    3243    3791    4510    -500  -606 -1191
ATOM    31    OD1 BASP 2    28.866  17.247  61.030 0.732 48.88
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ANISOU  31    OD1 BASP  2    6276    4203    8095   -1203 3147 -1901
ATOM    32    OD2 BASP  2   29.760  18.945  59.875  0.732 34.85
ANISOU  32    OD2 BASP  2    2852    3708    6680   -491   444  -1450
ATOM    33    N   THR   3   27.717  14.789  60.606  1.000 35.58
ANISOU  33    N   THR   3    4586    4123    4811    601  -1628  1516
ATOM    34    CA  THR   3   26.303  14.433  60.495  1.000 40.48
ANISOU  34    CA  THR   3    4650    4555    6175    371   -911  -385
ATOM    35    C   THR   3   25.382  15.647  60.611  1.000 39.82
ANISOU  35    C   THR   3    4376    4155    6598    320  -3864  -586
ATOM    36    O   THR   3   24.150  15.556  60.751  1.000 33.55
ANISOU  36    O   THR   3    4668    3107    4972    357  -2748  -588
ATOM    37    CB  THR   3   25.905  13.450  61.613  1.000 39.95
ANISOU  37    CB  THR   3    3787    4004    7387    160  -1209   62
ATOM    38    OG1 THR   3   26.591  13.851  62.817  1.000 61.83
ANISOU  38    OG1 THR   3   10134    5882    7476  -4164  -3020  2051
ATOM    39    CG2 THR   3   26.399  12.052  61.278  1.000 59.32
ANISOU  39    CG2 THR   3    4613    3971   13955   1114  -3135  -198
ATOM    40    N   THR   4   26.036  16.780  60.456  1.000 32.55
ANISOU  40    N   THR   4    4306    4611    3450    377  -2166  -217
ATOM    41    CA  THR   4   25.439  18.092  60.393  1.000 31.22
ANISOU  41    CA  THR   4    4275    4229    3358    -81  -1179   95
ATOM    42    C   THR   4   24.672  18.272  59.090  1.000 30.06
ANISOU  42    C   THR   4    4876    3341    3207    773  -1156  -204
ATOM    43    O   THR   4   25.195  17.935  58.017  1.000 31.64
ANISOU  43    O   THR   4    4877    3780    3363   1935  -1255   -52
ATOM    44    CB  THR   4   26.510  19.208  60.407  1.000 32.31
ANISOU  44    CB  THR   4    2320    4762    5194    475   -547  593
ATOM    45    OG1 THR   4   27.324  19.091  61.578  1.000 32.36
ANISOU  45    OG1 THR   4    3705    3955    4635    -79   -797  -389
ATOM    46    CG2 THR   4   25.852  20.582  60.458  1.000 27.22
ANISOU  46    CG2 THR   4    3728    4174    2443     71   304  -151
ATOM    47    N   VAL   5   23.464  18.796  59.211  1.000 21.69
ANISOU  47    N   VAL   5    4041    1985    2215   -543   -657  158
ATOM    48    CA  VAL   5   22.690  19.140  58.024  1.000 20.42
ANISOU  48    CA  VAL   5    3675    1964    2120   -622   -517  103
ATOM    49    C   VAL   5   23.199  20.489  57.499  1.000 17.01
ANISOU  49    C   VAL   5    2263    1803    2396   -279   -622   89
ATOM    50    O   VAL   5   23.156  21.449  58.252  1.000 21.10
ANISOU  50    O   VAL   5    3662    1885    2472   -389   -656   16
ATOM    51    CB  VAL   5   21.204  19.216  58.402  1.000 24.22
ANISOU  51    CB  VAL   5    3551    2155    3495  -1045   -396  783
ATOM    52    CG1 VAL   5   20.434  19.700  57.166  1.000 20.14
ANISOU  52    CG1 VAL   5    3202    1779    2672   -453    10  -226
ATOM    53    CG2 VAL   5   20.701  17.867  58.860  1.000 28.58
ANISOU  53    CG2 VAL   5    5258    2086    3516  -1226   431  510
ATOM    54    N   PRO   6   23.750  20.542  56.300  1.000 16.95
ANISOU  54    N   PRO   6    2378    1629    2434     29   -594  301
ATOM    55    CA  PRO   6   24.354  21.793  55.857  1.000 16.90
ANISOU  55    CA  PRO   6    1645    1775    3000      6   -445  303
ATOM    56    C   PRO   6   23.298  22.800  55.383  1.000 15.61
ANISOU  56    C   PRO   6    1477    1766    2687   -192   -437  545
ATOM    57    O   PRO   6   22.133  22.432  55.201  1.000 15.75
ANISOU  57    O   PRO   6    1578    1761    2647   -260   -579   55
ATOM    58    CB  PRO   6   25.216  21.375  54.682  1.000 19.85
ANISOU  58    CB  PRO   6    2320    1752    3468     50    70  182
ATOM    59    CG  PRO   6   24.632  20.095  54.187  1.000 24.76
ANISOU  59    CG  PRO   6    3550    2953    2904  -1186   300  -286
ATOM    60    CD  PRO   6   23.926  19.428  55.357  1.000 17.91
ANISOU  60    CD  PRO   6    1960    1962    2882   -168   -138  -44
ATOM    61    N   THR   7   23.723  24.031  55.156  1.000 14.38
ANISOU  61    N   THR   7    1518    1567    2378   -158   -616  100
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ATOM     62   CA  THR    7    22.907  25.103  54.610  1.000  14.09
ANISOU   62   CA  THR    7    1625    1554    2174    -255  -581  228
ATOM     63   C   THR    7    23.605  25.684  53.374  1.000  14.74
ANISOU   63   C   THR    7    1683    1849    2067    -193  -468  121
ATOM     64   O   THR    7    24.828  25.894  53.423  1.000  15.95
ANISOU   64   O   THR    7    1752    2137    2171    -378  -457  185
ATOM     65   CB  THR    7    22.795  26.248  55.637  1.000  15.25
ANISOU   65   CB  THR    7    1548    1846    2401    56   -124  5 2
ATOM     66   OG1 THR    7    22.208  25.717  56.829  1.000  16.91
ANISOU   66   OG1 THR    7    1818    2149    2458    -402  -183  4 7
ATOM     67   CG2 THR    7    21.952  27.387  55.040  1.000  16.09
ANISOU   67   CG2 THR    7    1651    1613    2848    -138  -263  - 2 5
ATOM     68   N   PHE    8    22.830  25.892  52.325  1.000  15.06
ANISOU   68   N   PHE    8    1966    1618    2137    -411  -558  230
ATOM     69   CA  PHE    8    23.317  26.545  51.136  1.000  14.76
ANISOU   69   CA  PHE    8    1857    1558    2192    -213  -411  281
ATOM     70   C   PHE    8    22.421  27.728  50.810  1.000  14.94
ANISOU   70   C   PHE    8    1907    1421    2347    -275  -357  181
ATOM     71   O   PHE    8    21.198  27.678  50.995  1.000  16.40
ANISOU   71   O   PHE    8    1782    1642    2808    -197  -550  3 4
ATOM     72   CB  PHE    8    23.242  25.562  49.948  1.000  16.49
ANISOU   72   CB  PHE    8    2123    1854    2287    49   -371  - 1
ATOM     73   CG  PHE    8    24.225  24.432  50.027  1.000  14.92
ANISOU   73   CG  PHE    8    1710    1824    2135    -197  -365  16 3
ATOM     74   CD1 PHE    8    23.822  23.227  50.600  1.000  16.78
ANISOU   74   CD1 PHE    8    1808    1726    2842    -300  -358  18 4
ATOM     75   CD2 PHE    8    25.539  24.558  49.602  1.000  16.67
ANISOU   75   CD2 PHE    8    1705    2130    2500    -310  -361  32 1
ATOM     76   CE1 PHE    8    24.702  22.183  50.742  1.000  16.74
ANISOU   76   CE1 PHE    8    2035    1966    2359    -4   -99  295
ATOM     77   CE2 PHE    8    26.420  23.525  49.773  1.000  19.18
ANISOU   77   CE2 PHE    8    1398    2153    3736    -408  -631  18 7
ATOM     78   CZ  PHE    8    26.026  22.336  50.351  1.000  17.90
ANISOU   78   CZ  PHE    8    1849    2003    2948    -119  -376  2 0
ATOM     79   N   SER    9    23.023  28.776  50.314  1.000  14.82
ANISOU   79   N   SER    9    2134    1488    2008    -351  -528  3 10
ATOM     80   CA  SER    9    22.338  29.902  49.715  1.000  15.12
ANISOU   80   CA  SER    9    2037    1259    2449    -357  -571  1 3 4
ATOM     81   C   SER    9    21.977  29.607  48.270  1.000  16.19
ANISOU   81   C   SER    9    2138    1791    2224    -374  -535  5 4 7
ATOM     82   O   SER    9    22.877  29.312  47.473  1.000  17.04
ANISOU   82   O   SER    9    2191    1892    2393    -423  -544  2 3 2
ATOM     83   CB  SER    9    23.306  31.113  49.696  1.000  18.74
ANISOU   83   CB  SER    9    2891    1712    2519    -1012 -478  7 1 7
ATOM     84   OG  SER    9    22.738  32.131  48.853  1.000  20.82
ANISOU   84   OG  SER    9    2866    1569    3477    -662  -854  6 0 7
ATOM     85   N   LEU   10    20.697  29.674  47.924  1.000  16.46
ANISOU   85   N   LEU   10    2215    1495    2542    -228  -740  - 4 8
ATOM     86   CA  LEU   10    20.345  29.401  46.529  1.000  17.55
ANISOU   86   CA  LEU   10    2263    1856    2551    -582  -694  3 6
ATOM     87   C   LEU   10    21.079  30.373  45.591  1.000  18.84
ANISOU   87   C   LEU   10    2506    1870    2784    -596  -830  3 5 7
ATOM     88   O   LEU   10    21.573  30.025  44.520  1.000  20.19
ANISOU   88   O   LEU   10    2705    2263    2704    -524  -663  5 0 8
ATOM     89   CB  LEU   10    18.844  29.559  46.327  1.000  18.87
ANISOU   89   CB  LEU   10    2302    2516    2354    -288  -715  2 8 0
ATOM     90   CG  LEU   10    18.355  29.333  44.895  1.000  18.28
ANISOU   90   CG  LEU   10    2182    2172    2591    -668  -677  - 3 0 1
ATOM     91   CD1 LEU   10    18.708  27.955  44.397  1.000  22.45
ANISOU   91   CD1 LEU   10    3418    2024    3089    -308  -537  1 7
ATOM     92   CD2 LEU   10    16.852  29.603  44.869  1.000  21.93
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ANISOU  92  CD2 LEU 10  2250    2658    3424  -504  -1139  7 5
ATOM    93  N   ALA 11  21.154  31.638  46.037 1.000 20.05
ANISOU  93  N   ALA 11  2862    1780    2977  -595  -1279  4 7 2
ATOM    94  CA  ALA 11  21.810  32.647  45.202 1.000 24.24
ANISOU  94  CA  ALA 11  3160    1670    4380  -455  -979   8 9 1
ATOM    95  C   ALA 11  23.285  32.309  44.946 1.000 21.06
ANISOU  95  C   ALA 11  3128    1937    2937  -644  -1016  4 3 1
ATOM    96  O   ALA 11  23.819  32.447  43.829 1.000 26.29
ANISOU  96  O   ALA 11  3569    3261    3158  -1628 -923   1137
ATOM    97  CB  ALA 11  21.752  33.989  45.953 1.000 24.29
ANISOU  97  CB  ALA 11  3740    1692    3797  -461  -216   9 9 6
ATOM    98  N   GLU 12  23.953  31.844  46.005 1.000 20.65
ANISOU  98  N   GLU 12  2829    1975    3044  -828  -930   6 7 4
ATOM    99  CA  GLU 12  25.354  31.463  45.862 1.000 21.19
ANISOU  99  CA  GLU 12  3036    2400    2615  -506  -715   5 9 8
ATOM   100  C   GLU 12  25.483  30.277  44.920 1.000 21.56
ANISOU 100  C   GLU 12  3894    2179    2117  -702  -206   9 8 8
ATOM   101  O   GLU 12  26.375  30.215  44.069 1.000 21.98
ANISOU 101  O   GLU 12  3463    2917    1971  -1144 -488   6 1 8
ATOM   102  CB  GLU 12  26.032  31.170  47.204 1.000 20.27
ANISOU 102  CB  GLU 12  2874    2192    2636  -221  -624   5 0 1
ATOM   103  CG  GLU 12  26.156  32.451  48.032 1.000 20.54
ANISOU 103  CG  GLU 12  2889    2316    2598  -344  -516   4 0 6
ATOM   104  CD  GLU 12  26.787  32.279  49.389 1.000 21.86
ANISOU 104  CD  GLU 12  3146    2542    2619  -1297 -612   7 9 9
ATOM   105  OE1 GLU 12  27.068  31.149  49.803 1.000 24.98
ANISOU 105  OE1 GLU 12  3642    2681    3169  -1348 -1088  1 1 3 4
ATOM   106  OE2 GLU 12  26.819  33.305  50.092 1.000 33.52
ANISOU 106  OE2 GLU 12  5881    2966    3888  -1119 -2251  4 6
ATOM   107  N   LEU 13  24.600  29.295  45.060 1.000 18.91
ANISOU 107  N   LEU 13  2567    2345    2275  -351  -390   3 8 2
ATOM   108  CA  LEU 13  24.645  28.117  44.174 1.000 18.61
ANISOU 108  CA  LEU 13  2575    2347    2149  -209   270   4 0 6
ATOM   109  C   LEU 13  24.432  28.566  42.738 1.000 21.40
ANISOU 109  C   LEU 13  3558    2367    2206  -709  -41    5 2 6
ATOM   110  O   LEU 13  25.102  28.095  41.824 1.000 23.75
ANISOU 110  O   LEU 13  3827    3216    1981  -823  -117   1 9 0
ATOM   111  CB  LEU 13  23.541  27.137  44.562 1.000 18.97
ANISOU 111  CB  LEU 13  2982    2243    1984  -462  -145   4 4 0
ATOM   112  CG  LEU 13  23.773  26.344  45.860 1.000 18.57
ANISOU 112  CG  LEU 13  2313    2322    2422  -467  -362   7 4 5
ATOM   113  CD1 LEU 13  22.526  25.480  46.070 1.000 20.74
ANISOU 113  CD1 LEU 13  2769    2266    2845  -789  -142   5 9 4
ATOM   114  CD2 LEU 13  25.023  25.473  45.858 1.000 19.80
ANISOU 114  CD2 LEU 13  2709    2229    2585  -244  -509  -107
ATOM   115  N   GLN 14  23.544  29.508  42.478 1.000 22.03
ANISOU 115  N   GLN 14  3596    2139    2635  -960  -903   3 7 9
ATOM   116  CA  GLN 14  23.284  29.978  41.104 1.000 23.79
ANISOU 116  CA  GLN 14  3010    3335    2694  -992  -816   6 4 8
ATOM   117  C   GLN 14  24.481  30.712  40.509 1.000 25.44
ANISOU 117  C   GLN 14  3360    3427    2881  -1070 -382   4 8 7
ATOM   118  O   GLN 14  24.655  30.829  39.288 1.000 30.04
ANISOU 118  O   GLN 14  3836    4657    2922  -1208 -427   8 9 8
ATOM   119  CB  GLN 14  22.064  30.906  41.131 1.000 26.28
ANISOU 119  CB  GLN 14  3133    3630    3222  -760  -863   9 3 8
ATOM   120  CG  GLN 14  20.772  30.111  41.355 1.000 23.26
ANISOU 120  CG  GLN 14  3106    2319    3413  -299  -577   5 1 4
ATOM   121  CD  GLN 14  19.586  31.020  41.631 1.000 23.69
ANISOU 121  CD  GLN 14  3384    2462    3155  -317  -393  -196
ATOM   122  OE1 GLN 14  19.734  32.104  42.160 1.000 28.34
ANISOU 122  OE1 GLN 14  4973    2619    3175  -183  -732  -408
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ATOM    123  NE2 GLN   14   18.398  30.513  41.349 1.000 23.60
ANISOU  123  NE2 GLN   14   3058    2969    2941    -383   54  245
ATOM    124  N   GLN   15   25.309  31.243  41.395 1.000 25.00
ANISOU  124  N   GLN   15   3078    3281    3140   -1159  -394  575
ATOM    125  CA  GLN   15   26.530  31.936  40.945 1.000 24.05
ANISOU  125  CA  GLN   15   2947    3560    2631    -866   -98  655
ATOM    126  C   GLN   15   27.650  30.920  40.707 1.000 26.06
ANISOU  126  C   GLN   15   3810    3951    2139    -345   406  668
ATOM    127  O   GLN   15   28.756  31.284  40.302 1.000 35.85
ANISOU  127  O   GLN   15   4294    4851    4476    102   1871 1192
ATOM    128  CB  GLN   15   27.018  32.918  42.009 1.000 25.90
ANISOU  128  CB  GLN   15   3055    3037    3748   -1092  -109  364
ATOM    129  CG  GLN   15   26.103  34.092  42.219 1.000 31.24
ANISOU  129  CG  GLN   15   4562    2577    4731    -806   962 1054
ATOM    130  CD  GLN   15   26.503  35.022  43.348 1.000 59.75
ANISOU  130  CD  GLN   15   9927    2475   10301   -1855   -14 -1904
ATOM    131  OE1 GLN   15   27.634  35.031  43.840 1.000 81.81
ANISOU  131  OE1 GLN   15  15059    3931   12094    -944 -6272 -1803
ATOM    132  NE2 GLN   15   25.539  35.841  43.767 1.000 91.46
ANISOU  132  NE2 GLN   15  14070    4846   15833    -923  3672 -4850
ATOM    133  N   GLY   16   27.379  29.643  40.969 1.000 29.90
ANISOU  133  N   GLY   16   4634    3820    2907    -239    22  787
ATOM    134  CA  GLY   16   28.410  28.649  40.699 1.000 28.76
ANISOU  134  CA  GLY   16   4466    3629    2833    -709   461  250
ATOM    135  C   GLY   16   29.339  28.473  41.878 1.000 27.60
ANISOU  135  C   GLY   16   3816    3779    2891    -616   914 1485
ATOM    136  O   GLY   16   30.398  27.867  41.725 1.000 31.47
ANISOU  136  O   GLY   16   3386    4758    3814    -899  1243 1023
ATOM    137  N   LEU   17   28.960  28.898  43.083 1.000 26.01
ANISOU  137  N   LEU   17   3295    3636    2950    -721   162  743
ATOM    138  CA  LEU   17   29.776  28.666  44.257 1.000 23.96
ANISOU  138  CA  LEU   17   2700    3032    3372    -601   100  673
ATOM    139  C   LEU   17   29.462  27.338  44.932 1.000 20.31
ANISOU  139  C   LEU   17   2222    2763    2733    -252   611  261
ATOM    140  O   LEU   17   28.389  26.780  44.789 1.000 23.13
ANISOU  140  O   LEU   17   2347    3134    3308    -443   263  859
ATOM    141  CB  LEU   17   29.645  29.806  45.286 1.000 25.94
ANISOU  141  CB  LEU   17   2886    2933    4035   -1318  -405  254
ATOM    142  CG  LEU   17   29.962  31.209  44.716 1.000 31.57
ANISOU  142  CG  LEU   17   3741    2948    5308    -523  1150  722
ATOM    143  CD1 LEU   17   29.550  32.358  45.615 1.000 32.04
ANISOU  143  CD1 LEU   17   5221    2887    4066   -1269   278  508
ATOM    144  CD2 LEU   17   31.458  31.278  44.416 1.000 38.11
ANISOU  144  CD2 LEU   17   3828    5491    5160   -2315   954  232
ATOM    145  N   HIS   18   30.441  26.822  45.681 1.000 22.49
ANISOU  145  N   HIS   18   2600    3067    2877    -662    42  449
ATOM    146  CA  HIS   18   30.289  25.644  46.537 1.000 21.54
ANISOU  146  CA  HIS   18   2378    2809    2996    -432   201  313
ATOM    147  C   HIS   18   29.908  24.376  45.790 1.000 22.76
ANISOU  147  C   HIS   18   2256    3245    3148   -1009   282  114
ATOM    148  O   HIS   18   29.147  23.565  46.331 1.000 22.60
ANISOU  148  O   HIS   18   2008    3064    3516    -629  -166  884
ATOM    149  CB  HIS   18   29.224  25.872  47.618 1.000 22.81
ANISOU  149  CB  HIS   18   2514    2879    3272    -526   450  421
ATOM    150  CG  HIS   18   29.320  27.248  48.217 1.000 21.70
ANISOU  150  CG  HIS   18   2797    3038    2411    -149    39  503
ATOM    151  ND1 HIS   18   30.438  27.773  48.807 1.000 25.01
ANISOU  151  ND1 HIS   18   3714    3505    2234    -207  -629  149
ATOM    152  CD2 HIS   18   28.370  28.216  48.269 1.000 24.95
ANISOU  152  CD2 HIS   18   3244    3278    2957     87   544  275
ATOM    153  CE1 HIS   18   30.197  28.982  49.223 1.000 29.26
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ANISOU  153  CE1 HIS  18   4603       3396     3118    -388  -335  2 7
ATOM    154  NE2 HIS  18   28.937  29.271  48.919 1.000 27.24
ANISOU  154  NE2 HIS  18   4582       3137     2632     2   224  3 6 5
ATOM    155  N   GLN  19   30.269  24.270  44.521 1.000 22.74
ANISOU  155  N   GLN  19   2724       3094     2822    -511  -123 4 2 3
ATOM    156  CA  GLN  19   29.806  23.113  43.730 1.000 23.85
ANISOU  156  CA  GLN  19   3129       2668     3263     148    63 8 9
ATOM    157  C   GLN  19   30.271  21.760  44.221 1.000 22.77
ANISOU  157  C   GLN  19   2532       3026     3095    -502  -574 7 7 8
ATOM    158  O   GLN  19   29.480  20.801  44.259 1.000 21.99
ANISOU  158  O   GLN  19   1869       2911     3574    -187     0  5 5 8
ATOM    159  CB  GLN  19   30.227  23.322  42.276 1.000 27.66
ANISOU  159  CB  GLN  19   5043       2519     2947     29  -339  4 5 8
ATOM    160  CG  GLN  19   29.397  24.333  41.523 1.000 26.21
ANISOU  160  CG  GLN  19   3289       3163     3508    299   171  4 3 7
ATOM    161  CD  GLN  19   27.917  24.368  41.862 1.000 32.47
ANISOU  161  CD  GLN  19   3403       4411     4521    -986   535  6 5 4
ATOM    162  OE1 GLN  19   27.154  23.604  41.277 1.000 39.69
ANISOU  162  OE1 GLN  19   3996       4238     6845    -262 -2770  1829
ATOM    163  NE2 GLN  19   27.511  25.212  42.811 1.000 42.55
ANISOU  163  NE2 GLN  19   3803       6153     6212     81  1944  1 1
ATOM    164  N   ASP  20   31.526  21.572  44.631 1.000 22.63
ANISOU  164  N   ASP  20   2073       3400     3123    -414    95  7 0 8
ATOM    165  CA  ASP  20   31.926  20.292  45.225 1.000 23.10
ANISOU  165  CA  ASP  20   1869       3674     3235     83   236  7 0 4
ATOM    166  C   ASP  20   31.190  20.042  46.546 1.000 20.03
ANISOU  166  C   ASP  20   1775       2963     2873    -280  -143  4 9 3
ATOM    167  O   ASP  20   30.772  18.899  46.768 1.000 21.48
ANISOU  167  O   ASP  20   1429       2884     3848    -311   225  2 2 4
ATOM    168  CB  ASP  20   33.414  20.268  45.521 1.000 27.66
ANISOU  168  CB  ASP  20   1835       4546     4130    -16    207  8 8 1
ATOM    169  CG  ASP  20   34.298  20.206  44.291 1.000 39.35
ANISOU  169  CG  ASP  20   2355       6893     5705    -654  1323 -1915
ATOM    170  OD1 ASP  20   33.870  19.914  43.153 1.000 35.78
ANISOU  170  OD1 ASP  20   3152       5452     4992    -741  1508 -797
ATOM    171  OD2 ASP  20   35.508  20.433  44.467 1.000 45.22
ANISOU  171  OD2 ASP  20   2201       8705     6277    -589  1088 - 87
ATOM    172  N   GLU  21   31.046  21.053  47.404 1.000 20.01
ANISOU  172  N   GLU  21   1574       2935     3093    -412  -241 3 6 7
ATOM    173  CA  GLU  21   30.323  20.811  48.665 1.000 18.97
ANISOU  173  CA  GLU  21   1412       2956     2838    -481  -464 1 1 8
ATOM    174  C   GLU  21   28.858  20.448  48.402 1.000 17.84
ANISOU  174  C   GLU  21   1386       2342     3050    -307  -395 2 3 4
ATOM    175  O   GLU  21   28.290  19.602  49.054 1.000 18.46
ANISOU  175  O   GLU  21   1671       2286     3057    -419  -351 1 1 6
ATOM    176  CB  GLU  21   30.415  22.058  49.563 1.000 20.10
ANISOU  176  CB  GLU  21   1646       2821     3170    -514  -499 1 2 7
ATOM    177  CG  GLU  21   31.893  22.322  49.918 1.000 24.11
ANISOU  177  CG  GLU  21   1682       3568     3912    -766  -326 - 7 1 1
ATOM    178  CD  GLU  21   32.574  23.380  49.081 1.000 29.70
ANISOU  178  CD  GLU  21   1330       4241     5713    -752  -666 5 2 1
ATOM    179  OE1 GLU  21   32.249  23.594  47.887 1.000 35.14
ANISOU  179  OE1 GLU  21   2623       4054     6677   -1336 -1741  1977
ATOM    180  OE2 GLU  21   33.483  24.007  49.678 1.000 39.39
ANISOU  180  OE2 GLU  21   3681       4425     6860   -2089 -1618  6 4 7
ATOM    181  N   PHE  22   28.231  21.048  47.395 1.000 17.30
ANISOU  181  N   PHE  22   1540       2352     2680    -243  -446 - 7 9
ATOM    182  CA  PHE  22   26.851  20.761  47.071 1.000 17.13
ANISOU  182  CA  PHE  22   1534       2166     2807    -235  -396 3 7 4
ATOM    183  C   PHE  22   26.733  19.329  46.552 1.000 17.41
ANISOU  183  C   PHE  22   1688       2500     2427    -502  -334 1 0 4
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ATOM    184  O    PHE  22   25.867  18.574  46.995 1.000 15.87
ANISOU  184  O    PHE  22   1570    2118    2343   -249  -361 131
ATOM    185  CB   PHE  22   26.305  21.840  46.149 1.000 18.00
ANISOU  185  CB   PHE  22   1747    2754    2337    70  -178   445
ATOM    186  CG   PHE  22   24.802  21.729  45.930 1.000 16.38
ANISOU  186  CG   PHE  22   1763    1748    2714   -90  -326 223
ATOM    187  CD1  PHE  22   23.934  21.723  47.003 1.000 18.29
ANISOU  187  CD1  PHE  22   1812    2091    3045   -197   -88  576
ATOM    188  CD2  PHE  22   24.290  21.720  44.641 1.000 18.62
ANISOU  188  CD2  PHE  22   2106    2079    2890   -143  -623 394
ATOM    189  CE1  PHE  22   22.569  21.727  46.771 1.000 18.90
ANISOU  189  CE1  PHE  22   1826    2086    3271   -198  -133 302
ATOM    190  CE2  PHE  22   22.911  21.660  44.379 1.000 19.28
ANISOU  190  CE2  PHE  22   2189    2023    3114   -242  -754 -144
ATOM    191  CZ   PHE  22   22.059  21.645  45.473 1.000 19.42
ANISOU  191  CZ   PHE  22   2048    1723    3607    90  -483  -376
ATOM    192  N    ARG  23   27.580  18.971  45.583 1.000 17.88
ANISOU  192  N    ARG  23   1647    2437    2709   -168  -218 317
ATOM    193  CA   ARG  23   27.520  17.594  45.079 1.000 19.18
ANISOU  193  CA   ARG  23   1724    2539    3022   -166   36 158
ATOM    194  C    ARG  23   27.767  16.595  46.211 1.000 19.11
ANISOU  194  C    ARG  23   1279    2461    3518   -173  -113 455
ATOM    195  O    ARG  23   27.107  15.547  46.229 1.000 18.82
ANISOU  195  O    ARG  23   1614    2156    3381   -33   181  -128
ATOM    196  CB   ARG  23   28.605  17.351  44.030 1.000 22.81
ANISOU  196  CB   ARG  23   1934    4099    2633   -34  -105 -354
ATOM    197  CG   ARG  23   28.248  17.790  42.617 1.000 24.82
ANISOU  197  CG   ARG  23   2601    4078    2752   191  -122 -204
ATOM    198  CD   ARG  23  -29.376  17.272  41.685 1.000 29.71
ANISOU  198  CD   ARG  23   2503    5619    3168   -285   908  704
ATOM    199  NE   ARG  23   30.479  18.206  41.800 1.000 30.96
ANISOU  199  NE   ARG  23   2877    5034    3851   -43   286  297
ATOM    200  CZ   ARG  23   30.549  19.360  41.148 1.000 29.49
ANISOU  200  CZ   ARG  23   2612    5063    3529   -225   606  177
ATOM    201  NH1  ARG  23   29.536  19.665  40.328 1.000 29.26
ANISOU  201  NH1  ARG  23   3242    4951    2923   -960   331  525
ATOM    202  NH2  ARG  23   31.629  20.092  41.345 1.000 32.61
ANISOU  202  NH2  ARG  23   2320    5347    4722   -134   519  179
ATOM    203  N    ARG  24   28.708  16.851  47.125 1.000 17.80
ANISOU  203  N    ARG  24   1262    2168    3332   183    38   9  8
ATOM    204  CA   ARG  24   28.930  15.899  48.222 1.000 18.85
ANISOU  204  CA   ARG  24   1368    2509    3287    69  -162  105
ATOM    205  C    ARG  24   27.701  15.811  49.114 1.000 17.51
ANISOU  205  C    ARG  24   1456    2015    3181   132  -177 243
ATOM    206  O    ARG  24   27.333  14.733  49.544 1.000 17.93
ANISOU  206  O    ARG  24   1851    1965    2997   -16   -402 253
ATOM    207  CB   ARG  24   30.203  16.321  48.991 1.000 19.88
ANISOU  207  CB   ARG  24   1685    2700    3169   -398  -218   4  4
ATOM    208  CG   ARG  24   31.459  16.053  48.135 1.000 29.07
ANISOU  208  CG   ARG  24   1467    4625    4954   269   203  709
ATOM    209  CD   ARG  24   32.700  16.206  49.016 1.000 41.84
ANISOU  209  CD   ARG  24   1745    7021    7130   -451  -494 -922
ATOM    210  NE   ARG  24   33.690  17.103  48.464 1.000 57.06
ANISOU  210  NE   ARG  24   4362    9316    8003  -3326  -669 -1141
ATOM    211  CZ   ARG  24   34.032  18.327  48.810 1.000 60.67
ANISOU  211  CZ   ARG  24   5961   10369    6723  -4627 -1324 -1586
ATOM    212  NH1  ARG  24   33.430  18.980  49.799 1.000 49.70
ANISOU  212  NH1  ARG  24   7748    6565    4569   -951 -2185 2226
ATOM    213  NH2  ARG  24   34.997  18.971  48.159 1.000 54.12
ANISOU  213  NH2  ARG  24   8696    8490    3378  -3780 -2352 1607
ATOM    214  N    CYS  25   27.092  16.963  49.370 1.000 15.74
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ANISOU  214   N   CYS  25   1435     1969     2574      -16    -393  - 33
ATOM    215   CA  CYS  25   25.884   16.921   50.223   1.000  16.39
ANISOU  215   CA  CYS  25   1518     1954     2756      -95    -317  -300
ATOM    216   C   CYS  25   24.826   16.068   49.547   1.000  15.73
ANISOU  216   C   CYS  25   1629     1699     2648     -114    -432   6  6
ATOM    217   O   CYS  25   24.124   15.262   50.155   1.000  15.89
ANISOU  217   O   CYS  25   1453     1801     2783      -88    -469  25 2
ATOM    218   CB  CYS  25   25.367   18.362   50.424   1.000  15.93
ANISOU  218   CB  CYS  25   1644     1779     2629      -49    -261  - 30
ATOM    219   SG  CYS  25   23.700   18.417   51.184   1.000  17.82
ANISOU  219   SG  CYS  25   1742     1825     3202     -122     -33   - 55
ATOM    220   N   LEU  26   24.623   16.308   48.250   1.000  15.25
ANISOU  220   N   LEU  26   1449     1843     2504      -54    -263  -142
ATOM    221   CA  LEU  26   23.560   15.590   47.534   1.000  15.62
ANISOU  221   CA  LEU  26   1616     1739     2580      -86    -453  4  8
ATOM    222   C   LEU  26   23.763   14.085   47.621   1.000  15.18
ANISOU  222   C   LEU  26   1697     1764     2306     -113    -479   6
ATOM    223   O   LEU  26   22.819   13.345   47.771   1.000  16.96
ANISOU  223   O   LEU  26   1797     1725     2920     -234    -664  -300
ATOM    224   CB  LEU  26   23.526   16.068   46.066   1.000  16.02
ANISOU  224   CB  LEU  26   1811     1645     2633     -191    -483  122
ATOM    225   CG  LEU  26   23.057   17.510   45.864   1.000  15.69
ANISOU  225   CG  LEU  26   1762     1716     2485       -6     -15  7  9
ATOM    226   CD1 LEU  26   23.252   17.880   44.405   1.000  17.48
ANISOU  226   CD1 LEU  26   1750     2360     2532      -17    -130  465
ATOM    227   CD2 LEU  26   21.584   17.680   46.290   1.000  17.11
ANISOU  227   CD2 LEU  26   1655     2188     2660      -29     -75   168
ATOM    228   N   ARG  27   25.027   13.648   47.494   1.000  17.26
ANISOU  228   N   ARG  27   1870     1818     2871      155    -326  140
ATOM    229   CA  ARG  27   25.295   12.205   47.372   1.000  18.75
ANISOU  229   CA  ARG  27   2108     1845     3170      270    -955  10 2
ATOM    230   C   ARG  27   25.240   11.599   48.744   1.000  17.95
ANISOU  230   C   ARG  27   1667     1801     3351      159    -897  219
ATOM    231   O   ARG  27   24.777   10.454   48.913   1.000  20.99
ANISOU  231   O   ARG  27   2158     1793     4026      -43    -360  168
ATOM    232   CB  ARG  27   26.641   12.008   46.670   1.000  21.35
ANISOU  232   CB  ARG  27   2815     2034     3264      622    -377 -129
ATOM    233   N   ASP  28   25.827   12.293   49.723   1.000  16.71
ANISOU  233   N   ASP  28   1487     2004     2856      178    -328  6 7
ATOM    234   CA  ASP  28   26.034   11.672   51.026   1.000  17.47
ANISOU  234   CA  ASP  28   1613     2095     2931      107    -301 1.2 7
ATOM    235   C   ASP  28   24.872   11.866   51.990   1.000  17.22
ANISOU  235   C   ASP  28   1414     2264     2863      223    -447 471
ATOM    236   O   ASP  28   24.816   11.081   52.937   1.000  17.62
ANISOU  236   O   ASP  28   1932     2139     2624      150    -565 327
ATOM    237   CB  ASP  28   27.306   12.237   51.657   1.000  22.17
ANISOU  237   CB  ASP  28   1581     3894     2948     -272    -467 559
ATOM    238   CG  ASP  28   28.590   11.906   50.941   1.000  24.72
ANISOU  238   CG  ASP  28   1596     3323     4472      236    -288 648
ATOM    239   OD1 ASP  28   28.572   10.905   50.199   1.000  27.56
ANISOU  239   OD1 ASP  28   2317     3071     5084      808    -284 572
ATOM    240   OD2 ASP  28   29.573   12.617   51.251   1.000  32.08
ANISOU  240   OD2 ASP  28   1584     4343     6261     -144    -470 416
ATOM    241   N   LYS  29   24.098   12.942   51.821   1.000  15.57
ANISOU  241   N   LYS  29   1475     1814     2627        5    -303  17 8
ATOM    242   CA  LYS  29   23.048   13.305   52.778   1.000  15.13
ANISOU  242   CA  LYS  29   1584     1999     2165      -68    -500  - 96
ATOM    243   C   LYS  29   21.686   13.500   52.118   1.000  14.56
ANISOU  243   C   LYS  29   1496     1352     2686       77    -452  106
ATOM    244   O   LYS  29   20.688   12.985   52.635   1.000  16.21
ANISOU  244   O   LYS  29   1627     1876     2657     -177    -315  - 5
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ATOM    245  CB  LYS  29   23.431  14.563  53.574 1.000 16.09
ANISOU  245  CB  LYS  29    1666    1672    2777    3  -642  -25
ATOM    246  CG  LYS  29   24.776  14.421  54.292 1.000 17.68
ANISOU  246  CG  LYS  29    2192    1918    2606    7 -1144 141
ATOM    247  CD  LYS  29   25.161  15.647  55.096 1.000 20.71
ANISOU  247  CD  LYS  29    2675    2044    3151  -35 -1518   4 1
ATOM    248  CE  LYS  29   26.498  15.331  55.844 1.000 22.24
ANISOU  248  CE  LYS  29    2203    2714    3535  142 -1369 -685
ATOM    249  NZ  LYS  29   26.955  16.594  56.492 1.000 32.67
ANISOU  249  NZ  LYS  29    3199    3381    5831 -502 -2085 -1260
ATOM    250  N   GLY  30   21.604  14.198  50.993 1.000 14.09
ANISOU  250  N   GLY  30    1552    1461    2340  135  -455 -100
ATOM    251  CA  GLY  30   20.358  14.373  50.250 1.000 14.09
ANISOU  251  CA  GLY  30    1428    1561    2365   92  -342  -97
ATOM    252  C   GLY  30   19.372  15.284  50.955 1.000 12.30
ANISOU  252  C   GLY  30    1423    1192    2059  -95  -275 9 4
ATOM    253  O   GLY  30   18.168  15.223  50.696 1.000 14.58
ANISOU  253  O   GLY  30    1435    1689    2415   52  -476 -121
ATOM    254  N   LEU  31   19.884  16.146  51.823 1.000 13.93
ANISOU  254  N   LEU  31    1472    1479    2343 -182  -248 -181
ATOM    255  CA  LEU  31   19.012  17.114  52.511 1.000 14.44
ANISOU  255  CA  LEU  31    1534    1457    2495 -235   -55 -246
ATOM    256  C   LEU  31   19.894  18.286  52.942 1.000 15.08
ANISOU  256  C   LEU  31    1411    1535    2784 -177  -326 -314
ATOM    257  O   LEU  31   21.113  18.136  53.140 1.000 15.64
ANISOU  257  O   LEU  31    1468    1664    2812 -169  -328 -67
ATOM    258  CB  LEU  31   18.222  16.560  53.694 1.000 16.76
ANISOU  258  CB  LEU  31    2192    1664    2511 -367   128 -213
ATOM    259  CG  LEU  31   18.883  16.517  55.039 1.000 20.16
ANISOU  259  CG  LEU  31    2435    2485    2739 -289  -141 4 4 5
ATOM    260  CD1 LEU  31   17.977  16.145  56.202 1.000 26.49
ANISOU  260  CD1 LEU  31    2253    5076    2738 -508  -341 969
ATOM    261  CD2 LEU  31   20.052  15.526  55.032 1.000 24.73
ANISOU  261  CD2 LEU  31    4192    2967    2237 1001   153   610
ATOM    262  N   PHE  32   19.289  19.462  53.052 1.000 14.11
ANISOU  262  N   PHE  32    1569    1457    2335 -231  -179 -2 0 7
ATOM    263  CA  PHE  32   20.020  20.697  53.417 1.000 13.56
ANISOU  263  CA  PHE  32    1447    1389    2317 -225  -137 1 4
ATOM    264  C   PHE  32   18.976  21.777  53.687 1.000 13.72
ANISOU  264  C   PHE  32    1411    1439    2365 -218  -421 -142
ATOM    265  O   PHE  32   17.889  21.711  53.118 1.000 15.50
ANISOU  265  O   PHE  32    1392    1862    2634 -175  -436 -389
ATOM    266  CB  PHE  32   20.958  21.157  52.308 1.000 15.01
ANISOU  266  CB  PHE  32    1379    2201    2125 -305  -342 231
ATOM    267  CG  PHE  32   20.381  21.156  50.920 1.000 14.60
ANISOU  267  CG  PHE  32    1649    1662    2237 -193  -429 118
ATOM    268  CD1 PHE  32   20.326  19.986  50.148 1.000 14.53
ANISOU  268  CD1 PHE  32    1328    1688    2504 -156  -507 1 5
ATOM    269  CD2 PHE  32   19.831  22.345  50.396 1.000 13.66
ANISOU  269  CD2 PHE  32    1320    1678    2191 -179  -309 1 6 6
ATOM    270  CE1 PHE  32   19.742  20.033  48.892 1.000 14.26
ANISOU  270  CE1 PHE  32    1507    1655    2256 -346  -271 1 9 9
ATOM    271  CE2 PHE  32   19.267  22.348  49.138 1.000 15.49
ANISOU  271  CE2 PHE  32    1681    1932    2272   72  -504  -126
ATOM    272  CZ  PHE  32   19.177  21.184  48.385 1.000 15.25
ANISOU  272  CZ  PHE  32    1979    1700    2117 -185  -295 168
ATOM    273  N   TYR  33   19.376  22.785  54.442 1.000 14.44
ANISOU  273  N   TYR  33    1813    1302    2372 -237  -496 -5 0
ATOM    274  CA  TYR  33   18.616  24.023  54.519 1.000 14.32
ANISOU  274  CA  TYR  33    1764    1415    2261 -143  -295 -111
ATOM    275  C   TYR  33   19.039  24.929  53.364 1.000 13.70
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ANISOU 275   C   TYR  33   1479     1565     2161    -79    -459  - 5
ATOM   276   O   TYR  33   20.158   24.871   52.859  1.000  15.28
ANISOU 276   O   TYR  33   1370     1524     2912    -190   -420  263
ATOM   277   CB  TYR  33   18.874   24.734   55.853  1.000  14.47
ANISOU 277   CB  TYR  33   1648     1717     2133    -197   -309  - 131
ATOM   278   CG  TYR  33   18.231   24.046   57.049  1.000  15.71
ANISOU 278   CG  TYR  33   2131     1537     2302    -339   -109  - 136
ATOM   279   CD1 TYR  33   16.938   24.390   57.453  1.000  17.41
ANISOU 279   CD1 TYR  33   2478     1967     2172    -154   246   - 249
ATOM   280   CD2 TYR  33   18.912   23.116   57.799  1.000  19.58
ANISOU 280   CD2 TYR  33   2901     2070     2468    144    115   1 92
ATOM   281   CE1 TYR  33   16.354   23.758   58.542  1.000  20.18
ANISOU 281   CE1 TYR  33   3138     1948     2581    26  740  - 102
ATOM   282   CE2 TYR  33   18.368   22.475   58.900  1.000  21.50
ANISOU 282   CE2 TYR  33   3571     2480     2118    340    196   1 22
ATOM   283   CZ  TYR  33   17.081   22.821   59.263  1.000  22.02
ANISOU 283   CZ  TYR  33   4140     1772     2454    471    1035  - 105
ATOM   284   OH  TYR  33   16.541   22.194   60.355  1.000  29.55
ANISOU 284   OH  TYR  33   5088     2809     3329    377    1512  728
ATOM   285   N   LEU  34   18.076   25.709   52.878  1.000  14.28
ANISOU 285   N   LEU  34   1496     1533     2396    -80    -517  - 1 7
ATOM   286   CA  LEU  34   18.278   26.620   51.756  1.000  15.02
ANISOU 286   CA  LEU  34   1830     1452     2425    -126   -580  2 0
ATOM   287   C   LEU  34   17.871   28.039   52.151  1.000  14.46
ANISOU 287   C   LEU  34   1703     1575     2217    -146   -241  - 7
ATOM   288   O   LEU  34   16.716   28.289   52.492  1.000  16.95
ANISOU 288   O   LEU  34   1663     1852     2923    -75    -186  - 6 4
ATOM   289   CB  LEU  34   17.389   26.127   50.598  1.000  16.54
ANISOU 289   CB  LEU  34   2355     1485     2444    -212   -749  2 5
ATOM   290   CG  LEU  34   17.633   26.800   49.249  1.000  15.65
ANISOU 290   CG  LEU  34   2010     1567     2371    -7   -633   - 6 3
ATOM   291   CD1 LEU  34   18.977   26.422   48.664  1.000  20.14
ANISOU 291   CD1 LEU  34   1919     2018     3717    -225   -171  2 60
ATOM   292   CD2 LEU  34   16.490   26.535   48.291  1.000  17.29
ANISOU 292   CD2 LEU  34   2152     1824     2592    -425   -819  2 1 4
ATOM   293   N   THR  35   18.842   28.944   52.065  1.000  15.48
ANISOU 293   N   THR  35   1817     1532     2534    -230   -200  1 3
ATOM   294   CA  THR  35   18.587   30.362   52.324  1.000  17.02
ANISOU 294   CA  THR  35   2149     1537     2781    -206   -827  - 196
ATOM   295   C   THR  35   18.491   31.127   51.010  1.000  17.04
ANISOU 295   C   THR  35   1895     1693     2887    -149   -882  - 4 4
ATOM   296   O   THR  35   18.765   30.572   49.938  1.000  17.01
ANISOU 296   O   THR  35   1880     1692     2893    -262   -458  144
ATOM   297   CB  THR  35   19.772   30.917   53.180  1.000  17.79
ANISOU 297   CB  THR  35   2018     1942     2800    -87    -854  - 2 0 0
ATOM   298   OG1 THR  35   20.986   30.673   52.474  1.000  21.10
ANISOU 298   OG1 THR  35   2110     2035     3873    -253   -364  - 4 0 2
ATOM   299   CG2 THR  35   19.847   30.331   54.567  1.000  20.44
ANISOU 299   CG2 THR  35   2600     2194     2971    228    -1113  5 9
ATOM   300   N   ASP  36   18.186   32.407   51.059  1.000  18.62
ANISOU 300   N   ASP  36   2287     1747     3040    -187   -316  149
ATOM   301   CA  ASP  36   18.240   33.300   49.884  1.000  20.75
ANISOU 301   CA  ASP  36   2678     1722     3483    -632   -508  3 7 4
ATOM   302   C   ASP  36   17.474   32.711   48.703  1.000  20.05
ANISOU 302   C   ASP  36   2104     1929     3586    198    -928  4 8 9
ATOM   303   O   ASP  36   17.929   32.685   47.540  1.000  21.06
ANISOU 303   O   ASP  36   2593     1749     3662    -496   -756  1 3 1
ATOM   304   CB  ASP  36   19.703   33.561   49.500  1.000  22.21
ANISOU 304   CB  ASP  36   2666     2366     3406    -876   -755  8 0 7
ATOM   305   CG  ASP  36   20.588   34.192   50.551  1.000  23.05
ANISOU 305   CG  ASP  36   2537     1818     4402    -175   -833  - 2 0 8
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ATOM    306  OD1 ASP  36  20.061  34.886  51.457 1.000 26.16
ANISOU  306  OD1 ASP  36  2981    2100    4860    378  -777 -381
ATOM    307  OD2 ASP  36  21.824  33.982  50.528 1.000 24.87
ANISOU  307  OD2 ASP  36  2532    1994    4924    -49  -950 -628
ATOM    308  N   CYS  37  16.282  32.196  48.971 1.000 20.25
ANISOU  308  N   CYS  37  2135    1711    3849    118  -638 -263
ATOM    309  CA  CYS  37  15.463  31.587  47.902 1.000 20.28
ANISOU  309  CA  CYS  37  2390    1478    3839    136  -799 -138
ATOM    310  C   CYS  37  14.078  32.183  47.818 1.000 19.90
ANISOU  310  C   CYS  37  2374    1724    3463    214  -711  -74
ATOM    311  O   CYS  37  13.176  31.629  47.156 1.000 22.75
ANISOU  311  O   CYS  37  2569    1984    4091    -12 -1108   15
ATOM    312  CB  CYS  37  15.359  30.061  48.083 1.000 22.21
ANISOU  312  CB  CYS  37  2739    1454    4247    194  -477 -115
ATOM    313  SG  CYS  37  14.500  29.595  49.596 1.000 22.84
ANISOU  313  SG  CYS  37  2854    1884    3942   -203  -922  141
ATOM    314  N   GLY  38  13.855  33.390  48.314 1.000 20.85
ANISOU  314  N   GLY  38  2353    1638    3933    217  -375  -42
ATOM    315  CA  GLY  38  12.570  34.044  48.194 1.000 23.42
ANISOU  315  CA  GLY  38  2233    1874    4790    255  -292  165
ATOM    316  C   GLY  38  11.534  33.619  49.217 1.000 23.29
ANISOU  316  C   GLY  38  2577    2045    4228    113  -136 -601
ATOM    317  O   GLY  38  10.400  34.091  49.129 1.000 25.58
ANISOU  317  O   GLY  38  2529    3424    3765    214   -96 -264
ATOM    318  N   LEU  39  11.894  32.836  50.237 1.000 24.55
ANISOU  318  N   LEU  39  2310    2980    4037    119   -46 -364
ATOM    319  CA  LEU  39  10.938  32.331  51.195 1.000 24.44
ANISOU  319  CA  LEU  39  2637    2964    3684   -105   175 -946
ATOM    320  C   LEU  39  11.107  32.885  52.593 1.000 35.41
ANISOU  320  C   LEU  39  5341    4215    3898   -796   165 -1435
ATOM    321  O   LEU  39  11.784  32.313  53.441 1.000 43.41
ANISOU  321  O   LEU  39  7338    4986    4171  -2639 -1333  -303
ATOM    322  CB  LEU  39  10.850  30.810  51.206 1.000 26.48
ANISOU  322  CB  LEU  39  4244    2940    2879     49   -70 -261
ATOM    323  CG  LEU  39  10.404  30.097  49.921 1.000 30.21
ANISOU  323  CG  LEU  39  4834    2452    4195    258 -1618 -474
ATOM    324  CD1 LEU  39  10.683  28.595  49.972 1.000 24.78
ANISOU  324  CD1 LEU  39  3351    2597    3468    424  -707 -118
ATOM    325  CD2 LEU  39   8.940  30.407  49.640 1.000 27.50
ANISOU  325  CD2 LEU  39  4828    2118    3503    860  -860 -323
ATOM    326  N   THR  40  10.365  33.957  52.882 1.000 45.58
ANISOU  326  N   THR  40  7392    4849    5077   -520  2852 -1993
ATOM    327  CA  THR  40  10.610  34.661  54.136 1.000 32.50
ANISOU  327  CA  THR  40  4224    3732    4393    999   961 -558
ATOM    328  C   THR  40   9.700  34.177  55.248 1.000 29.68
ANISOU  328  C   THR  40  3175    4204    3898   -116   294 -1630
ATOM    329  O   THR  40   8.653  33.556  55.031 1.000 39.75
ANISOU  329  O   THR  40  3930    5847    5326  -1079  -301 -1653
ATOM    330  CB  THR  40  10.641  36.183  53.997 1.000 56.31
ANISOU  330  CB  THR  40  10586   3758    7052  -1417  1006 -992
ATOM    331  OG1 THR  40  11.545  36.606  52.946 1.000 68.39
ANISOU  331  OG1 THR  40  7379    3900    14707 -1978  3617 -246
ATOM    332  CG2 THR  40  11.214  36.837  55.256 1.000 70.22
ANISOU  332  CG2 THR  40  8265    5228    13188  1389 -4422 -3241
ATOM    333  N   ASP  41  10.191  34.302  56.486 1.000 33.20
ANISOU  333  N   ASP  41  3580    5223    3810   -203   307 -1779
ATOM    334  CA  ASP  41   9.329  33.943  57.613 1.000 27.51
ANISOU  334  CA  ASP  41  2705    3858    3891     91  -253 -1061
ATOM    335  C   ASP  41   8.107  34.861  57.660 1.000 33.43
ANISOU  335  C   ASP  41  3131    3064    6508     32   547 -1307
ATOM    336  O   ASP  41   7.034  34.469  58.101 1.000 30.76
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ANISOU  336  O    ASP  41            2690    3223    5774      141   -149  -969
ATOM    337  CB   ASP  41   10.113  34.135  58.915  1.000 33.51
ANISOU  337  CB   ASP  41            4853    4026    3852    -1222   -698  -938
ATOM    338  CG   ASP  41    9.453  33.351  60.039  1.000 33.37
ANISOU  338  CG   ASP  41            3324    5291    4065     -739   -501  -571
ATOM    339  OD1  ASP  41    9.152  32.164  59.780  1.000 34.95
ANISOU  339  OD1  ASP  41            4040    4681    4557     -380    824   -92
ATOM    340  OD2  ASP  41    9.395  33.904  61.161  1.000 86.76
ANISOU  340  OD2  ASP  41           18972   10427    3567   -10425    588 -1858
ATOM    341  N    THR  42    8.272  36.089  57.205  1.000 32.71
ANISOU  341  N    THR  42            3217    3695    5516        9    -58  -586
ATOM    342  CA   THR  42    7.198  37.074  57.221  1.000 38.48
ANISOU  342  CA   THR  42            4747    4161    5711     1067   -861  -630
ATOM    343  C    THR  42    6.005  36.640  56.375  1.000 35.83
ANISOU  343  C    THR  42            3333    4044    6237     1136    157 -1162
ATOM    344  O    THR  42    4.377  36.606  56.900  1.000 38.90
ANISOU  344  O    THR  42            4048    3603    7128     1186   1059  1224
ATOM    345  CB   THR  42    7.751  38.449  56.815  1.000 37.05
ANISOU  345  CB   THR  42            4526    3763    5788     1021   -677 -1532
ATOM    346  OG1  THR  42    8.831  38.301  55.889  1.000 98.08
ANISOU  346  OG1  THR  42           16381   13757    7127    -3208   7500 -2318
ATOM    347  CG2  THR  42    8.358  39.113  58.047  1.000 36.08
ANISOU  347  CG2  THR  42            6097    3613    3997      886  -1119   269
ATOM    348  N    GLU  43    6.259  36.184  55.173  1.000 34.64
ANISOU  348  N    GLU  43            4208    3312    5642      656   -275  -698
ATOM    349  CA   GLU  43    5.391  35.557  54.192  1.000 32.98
ANISOU  349  CA   GLU  43            3527    2886    6120     1199   -883  -152
ATOM    350  C    GLU  43    4.701  34.300  54.713  1.000 41.67
ANISOU  350  C    GLU  43            3454    4151    8229      225  -1743   953
ATOM    351  O    GLU  43    3.484  34.124  54.605  1.000 38.53
ANISOU  351  O    GLU  43            3375    4041    7222      589  -1417  -578
ATOM    352  CB   GLU  43    6.278  35.074  53.026  1.000 44.72
ANISOU  352  CB   GLU  43            5991    4098    6901       28    137 -2137
ATOM    353  CG   GLU  43    6.658  36.125  52.003  1.000 53.42
ANISOU  353  CG   GLU  43            5931    6417    7949     -993   1540 -1338
ATOM    354  CD   GLU  43    7.838  36.976  52.429  1.000 50.41
ANISOU  354  CD   GLU  43            4087    7601    7467     -439   2486 -1725
ATOM    355  OE1  GLU  43    8.024  37.112  53.661  1.000 59.44
ANISOU  355  OE1  GLU  43            7237    7592    7757    -1284   1632 -2146
ATOM    356  OE2  GLU  43    8.555  37.476  51.531  1.000 71.33
ANISOU  356  OE2  GLU  43           11550    6344    9207    -4131   6267 -4645
ATOM    357  N    LEU  44    5.511  33.373  55.224  1.000 27.80
ANISOU  357  N    LEU  44            2837    2924    4802      -55   -626  -227
ATOM    358  CA   LEU  44    4.926  32.222  55.902  1.000 27.88
ANISOU  358  CA   LEU  44            2207    3379    5009      241    813  -382
ATOM    359  C    LEU  44    3.886  32.670  56.934  1.000 34.30
ANISOU  359  C    LEU  44            1930    4771    6333     -537    776 -2629
ATOM    360  O    LEU  44    2.781  32.159  56.924  1.000 33.35
ANISOU  360  O    LEU  44            2046    5235    5390     -840    705 -2397
ATOM    361  CB   LEU  44    5.999  31.394  56.587  1.000 24.59
ANISOU  361  CB   LEU  44            2781    3494    3070       81    940   -74
ATOM    362  CG   LEU  44    5.592  30.147  57.343  1.000 31.76
ANISOU  362  CG   LEU  44            2414    5135    4517     -845    792  1217
ATOM    363  CD1  LEU  44    4.563  29.328  56.575  1.000 47.71
ANISOU  363  CD1  LEU  44            5860    7081    5188    -3576   3333 -2541
ATOM    364  CD2  LEU  44    6.793  29.259  57.653  1.000 51.56
ANISOU  364  CD2  LEU  44            6294    3688    9608     1956   2240  1382
ATOM    365  N    LYS  45    4.212  33.712  57.694  1.000 41.91
ANISOU  365  N    LYS  45            2865    6802    6256    -1455    381 -3537
ATOM    366  CA   LYS  45    3.369  34.195  58.773  1.000 44.31
ANISOU  366  CA   LYS  45            4768    5427    6639       74    837 -2985
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ATOM   367  C   LYS  45   1.981   34.582  58.278 1.000 38.58
ANISOU 367  C   LYS  45   4535    3445    6681   -245  1221 -2820
ATOM   368  O   LYS  45   0.984   34.238  58.902 1.000 39.93
ANISOU 368  O   LYS  45   4857    3594    6720    262  1634 -2337
ATOM   369  CB  LYS  45   4.038   35.400  59.447 1.000 50.20
ANISOU 369  CB  LYS  45   4944    5561    8569   1081  -447 -3980
ATOM   370  CG  LYS  45   3.082   36.546  59.706 1.000 53.07
ANISOU 370  CG  LYS  45   3548    6321   10296   1148 -2094 -4809
ATOM   371  CD  LYS  45   3.714   37.922  59.622 1.000 58.29
ANISOU 371  CD  LYS  45   4723    5694   11730   1422 -3745 -5024
ATOM   372  CE  LYS  45   3.199   38.793  60.761 1.000 65.33
ANISOU 372  CE  LYS  45   6294    6898   11629   1072 -3430 -5603
ATOM   373  NZ  LYS  45   1.713   38.779  60.852 1.000 73.75
ANISOU 373  NZ  LYS  45   6392    9216   12412   -718 -1071 -7436
ATOM   374  N   SER  46   1.973   35.341  57.193 1.000 36.94
ANISOU 374  N   SER  46   4074    3478    6484   -956  1068 -2939
ATOM   375  CA  SER  46   0.743   35.856  56.607 1.000 37.61
ANISOU 375  CA  SER  46   3983    3417    6892  -1335   988 -2335
ATOM   376  C   SER  46  -0.137   34.702  56.137 1.000 34.45
ANISOU 376  C   SER  46   3430    3057    6602  -1104  1656 -2394
ATOM   377  O   SER  46  -1.337   34.625  56.449 1.000 29.50
ANISOU 377  O   SER  46   3195    2789    5224   -587  1093 -1206
ATOM   378  CB  SER  46   1.160   36.726  55.419 1.000 40.36
ANISOU 378  CB  SER  46   4102    3809    7425  -2099   617 -1930
ATOM   379  OG  SER  46   0.018   37.017  54.630 1.000 43.38
ANISOU 379  OG  SER  46   5005    3431    8048  -1261    53 -1863
ATOM   380  N   ALA  47   0.493   33.808  55.361 1.000 29.82
ANISOU 380  N   ALA  47   3246    2173    5910    -18   809 -1228
ATOM   381  CA  ALA  47  -0.208   32.623  54.879 1.000 25.84
ANISOU 381  CA  ALA  47   3566    2106    4148      7   630  -891
ATOM   382  C   ALA  47  -0.722   31.792  56.058 1.000 25.02
ANISOU 382  C   ALA  47   2591    2344    4572    481   280  -280
ATOM   383  O   ALA  47  -1.888   31.381  56.063 1.000 23.19
ANISOU 383  O   ALA  47   2850    2366    3597    129   318 -1119
ATOM   384  CB  ALA  47   0.615   31.791  53.912 1.000 26.76
ANISOU 384  CB  ALA  47   2892    2764    4511    270   351 -1134
ATOM   385  N   LYS  48   0.132   31.529  57.041 1.000 24.64
ANISOU 385  N   LYS  48   3107    2076    4178    130   -57 -1085
ATOM   386  CA  LYS  48  -0.186   30.712  58.202 1.000 25.83
ANISOU 386  CA  LYS  48   3545    2979    3291    -16    30 -1416
ATOM   387  C   LYS  48  -1.337   31.339  59.003 1.000 28.58
ANISOU 387  C   LYS  48   3373    3344    4144   -354   129 -2041
ATOM   388  O   LYS  48  -2.310   30.694  59.396 1.000 27.04
ANISOU 388  O   LYS  48   3849    2793    3633    312   419  -634
ATOM   389  CB  LYS  48   1.035   30.654  59.149 1.000 28.95
ANISOU 389  CB  LYS  48   3507    3294    4200   -274  -257  -738
ATOM   390  CG  LYS  48   0.775   29.694  60.313 1.000 32.96
ANISOU 390  CG  LYS  48   4412    3214    4897    113  -543  -156
ATOM   391  CD  LYS  48   1.418   30.222  61.570 1.000 39.92
ANISOU 391  CD  LYS  48   5828    4616    4724    705 -1278   -39
ATOM   392  CE  LYS  48   1.217   29.320  62.769 1.000 33.67
ANISOU 392  CE  LYS  48   3973    4020    4799   1402  -205  -356
ATOM   393  NZ  LYS  48   0.731   30.100  63.946 1.000 38.33
ANISOU 393  NZ  LYS  48   4516    5230    4816    916 -1039 -1555
ATOM   394  N   ASP  49  -1.253   32.656  59.255 1.000 23.78
ANISOU 394  N   ASP  49   2796    3136    3104     79  -459 -1588
ATOM   395  CA  ASP  49  -2.298   33.326  60.006 1.000 24.05
ANISOU 395  CA  ASP  49   2826    2913    3398   -291   366 -1043
ATOM   396  C   ASP  49  -3.679   33.181  59.366 1.000 24.45
ANISOU 396  C   ASP  49   2721    3270    3300   -220   555 -1454
ATOM   397  O   ASP  49  -4.637   32.951  60.082 1.000 27.10
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ANISOU 397  O   ASP 49   2863    3177    4257    -368   1004  -1544
ATOM   398  CB  ASP 49  -2.034  34.824  60.167 1.000 30.34
ANISOU 398  CB  ASP 49   3695    3210    4623    -559   713   -2178
ATOM   399  CG  ASP 49  -0.924  35.181  61.128 1.000 37.18
ANISOU 399  CG  ASP 49   5259    4057    4810   -1109  -211  -2007
ATOM   400  OD1 ASP 49  -0.556  34.266  61.904 1.000 33.36
ANISOU 400  OD1 ASP 49   3717    4549    4408    -737   888   -1727
ATOM   401  OD2 ASP 49  -0.525  36.375  61.087 1.000 48.45
ANISOU 401  OD2 ASP 49   7960    3575    6875    -927  -2887 -2409
ATOM   402  N   LEU 50  -3.788  33.402  58.059 1.000 24.46
ANISOU 402  N   LEU 50   3114    2668    3513    374   200   -1298
ATOM   403  CA  LEU 50  -5.123  33.344  57.471 1.000 22.92
ANISOU 403  CA  LEU 50   2949    2145    3614    161   397   -562
ATOM   404  C   LEU 50  -5.679  31.937  57.328 1.000 21.79
ANISOU 404  C   LEU 50   3345    2197    2737    33    417  -556
ATOM   405  O   LEU 50  -6.878  31.741  57.475 1.000 24.96
ANISOU 405  O   LEU 50   3463    2502    3517    -276  766   -1181
ATOM   406  CB  LEU 50  -5.254  34.137  56.194 1.000 22.13
ANISOU 406  CB  LEU 50   3127    2016    3266    -103  524   -757
ATOM   407  CG  LEU 50  -6.661  34.578  55.807 1.000 28.87
ANISOU 407  CG  LEU 50   3549    3538    3881    961   825   208
ATOM   408  CD1 LEU 50  -7.389  35.082  57.049 1.000 52.72
ANISOU 408  CD1 LEU 50   4567    8556    6907    940   2929  -1936
ATOM   409  CD2 LEU 50  -6.644  35.642  54.723 1.000 41.07
ANISOU 409  CD2 LEU 50   6971    3395    5240   -1005 -2258  857
ATOM   410  N   VAL 51  -4.801  30.956  57.138 1.000 21.78
ANISOU 410  N   VAL 51   3345    2052    2877    -160  216   -860
ATOM   411  CA  VAL 51  -5.293  29.580  57.118 1.000 19.40
ANISOU 411  CA  VAL 51   2631    2056    2683    -12   173   -303
ATOM   412  C   VAL 51  -5.631  29.135  58.533 1.000 25.25
ANISOU 412  C   VAL 51   4453    2656    2485    -753  587   -955
ATOM   413  O   VAL 51  -6.652  28.454  58.725 1.000 25.07
ANISOU 413  O   VAL 51   4555    2176    2795    -484  1185  -827
ATOM   414  CB  VAL 51  -4.377  28.589  56.396 1.000 18.78
ANISOU 414  CB  VAL 51   2729    1786    2620    -72   171   -313
ATOM   415  CG1 VAL 51  -3.152  28.238  57.231 1.000 20.42
ANISOU 415  CG1 VAL 51   3002    1841    2918    295   -13   -480
ATOM   416  CG2 VAL 51  -5.147  27.306  56.021 1.000 24.10
ANISOU 416  CG2 VAL 51   3112    2337    3708    -511  355   -846
ATOM   417  N   ILE 52  -4.836  29.500  59.534 1.000 25.23
ANISOU 417  N   ILE 52   4514    2471    2603    388   76   -874
ATOM   418  CA  ILE 52  -5.205  29.114  60.921 1.000 24.38
ANISOU 418  CA  ILE 52   3488    3010    2765    248   19   -509
ATOM   419  C   ILE 52  -6.498  29.771  61.355 1.000 24.20
ANISOU 419  C   ILE 52   3026    2482    3687    -354  114   -648
ATOM   420  O   ILE 52  -7.328  29.182  62.071 1.000 27.73
ANISOU 420  O   ILE 52   3735    2812    3989    -198  614   -334
ATOM   421  CB  ILE 52  -4.016  29.427  61.829 1.000 27.59
ANISOU 421  CB  ILE 52   3321    4347    2815    590   0    -785
ATOM   422  CG1 ILE 52  -2.853  28.439  61.510 1.000 31.45
ANISOU 422  CG1 ILE 52   3278    5248    3425    741   363   -1288
ATOM   423  CG2 ILE 52  -4.293  29.312  63.317 1.000 33.62
ANISOU 423  CG2 ILE 52   3827    6199    2750    881   150   -1454
ATOM   424  CD1 ILE 52  -1.930  28.351  62.710 1.000 36.22
ANISOU 424  CD1 ILE 52   3956    5082    4722    979   -601 -234
ATOM   425  N   ASP 53  -6.771  30.992  60.913 1.000 24.56
ANISOU 425  N   ASP 53   3479    2878    2974    165   609   -426
ATOM   426  CA  ASP 53  -8.051  31.646  61.278 1.000 23.50
ANISOU 426  CA  ASP 53   3242    2942    2745    -5    355  -677
ATOM   427  C   ASP 53  -9.201  30.929  60.594 1.000 26.34
ANISOU 427  C   ASP 53   3462    2986    3561    -435  612   -1064
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ATOM    428  O   ASP  53   -10.342 30.836  61.051 1.000 29.73
ANISOU  428  O   ASP  53   3468     3085    4743    -436   937  -1142
ATOM    429  CB  ASP  53    -7.964 33.084  60.772 1.000 33.83
ANISOU  429  CB  ASP  53   3800     2322    6730     -92  1806  -933
ATOM    430  CG  ASP  53    -9.308 33.758  60.583 1.000 32.05
ANISOU  430  CG  ASP  53   4652     2412    5113     172  -302  -1138
ATOM    431  OD1 ASP  53    -9.653 34.524  61.486 1.000 43.68
ANISOU  431  OD1 ASP  53   3661     4686    8248     150  1379  -3120
ATOM    432  OD2 ASP  53    -9.950 33.556  59.532 1.000 51.30
ANISOU  432  OD2 ASP  53   8386     6074    5033   -2062 -1738   922
ATOM    433  N   PHE  54    -8.933 30.376  59.413 1.000 25.39
ANISOU  433  N   PHE  54   3372     2640    3637      72    71 -1176
ATOM    434  CA  PHE  54    -9.917 29.557  58.704 1.000 24.10
ANISOU  434  CA  PHE  54   3015     3264    2876    -366   263  -539
ATOM    435  C   PHE  54   -10.180 28.259  59.456 1.000 24.00
ANISOU  435  C   PHE  54   3264     3174    2680    -365   459  -688
ATOM    436  O   PHE  54   -11.333 27.393  59.686 1.000 28.19
ANISOU  436  O   PHE  54   3551     3246    3914    -549  1305 -1130
ATOM    437  CB  PHE  54    -9.465 29.273  57.263 1.000 23.62
ANISOU  437  CB  PHE  54   3241     2955    2779    -249   218  -434
ATOM    438  CG  PHE  54   -10.522 28.499  56.461 1.000 27.62
ANISOU  438  CG  PHE  54   4712     2945    2838    -694  -636   1 4
ATOM    439  CD1 PHE  54   -11.729 29.078  56.087 1.000 31.38
ANISOU  439  CD1 PHE  54   3613     4658    3654    -951  -262  -621
ATOM    440  CD2 PHE  54   -10.283 27.210  56.033 1.000 30.92
ANISOU  440  CD2 PHE  54   5782     3589    2377    -831   293  -844
ATOM    441  CE1 PHE  54   -12.653 28.406  55.307 1.000 44.29
ANISOU  441  CE1 PHE  54  -5504     5404    5919   -3066 -2057  1178
ATOM    442  CE2 PHE  54   -11.228 26.503  55.306 1.000 38.69
ANISOU  442  CE2 PHE  54   7997     4412    2289   -2803   155  -387
ATOM    443  CZ  PHE  54   -12.424 27.092  54.927 1.000 42.33
ANISOU  443  CZ  PHE  54   5992     6305    3787   -4256    54  -446
ATOM    444  N   PHE  55    -9.126 27.558  59.870 1.000 25.87
ANISOU  444  N   PHE  55   3787     2768    3276     -85   431  -839
ATOM    445  CA  PHE  55    -9.195 26.310  60.625 1.000 25.69
ANISOU  445  CA  PHE  55   3567     3042    3151      68   763  -711
ATOM    446  C   PHE  55    -9.929 26.484  61.944 1.000 27.69
ANISOU  446  C   PHE  55   3357     3961    3205     181   703  -719
ATOM    447  O   PHE  55   -10.745 25.670  62.373 1.000 30.08
ANISOU  447  O   PHE  55   4046     4165    3217     142   878  -127
ATOM    448  CB  PHE  55    -7.759 25.873  60.932 1.000 25.48
ANISOU  448  CB  PHE  55   3556     3159    2964     117   835  -638
ATOM    449  CG  PHE  55    -7.019 25.242  59.762 1.000 26.31
ANISOU  449  CG  PHE  55   3437     3039    3522    -468  1068 -1156
ATOM    450  CD1 PHE  55    -7.611 24.820  58.590 1.000 27.09
ANISOU  450  CD1 PHE  55   3553     3895    2845   -1018  1404  -658
ATOM    451  CD2 PHE  55    -5.651 25.031  59.935 1.000 31.68
ANISOU  451  CD2 PHE  55   3244     4185    4609    -726  1123 -2221
ATOM    452  CE1 PHE  55    -6.878 24.150  57.621 1.000 23.89
ANISOU  452  CE1 PHE  55   3472     2525    3079     -58   551  -547
ATOM    453  CE2 PHE  55    -4.904 24.433  58.950 1.000 31.74
ANISOU  453  CE2 PHE  55   3487     4387    4186     226   337 -2304
ATOM    454  CZ  PHE  55    -5.514 24.004  57.770 1.000 24.23
ANISOU  454  CZ  PHE  55   3706     2187    3312     414   -22  -416
ATOM    455  N   GLU  56    -9.633 27.581  62.629 1.000 30.39
ANISOU  455  N   GLU  56   3961     5033    2553    -308   520 -1110
ATOM    456  CA  GLU  56   -10.222 27.875  63.925 1.000 30.18
ANISOU  456  CA  GLU  56   4160     4504    2805    -734  1221  -637
ATOM    457  C   GLU  56   -11.650 28.401  63.820 1.000 33.50
ANISOU  457  C   GLU  56   4324     4124    4280    -535  1489  -892
ATOM    458  O   GLU  56   -12.470 28.149  64.708 1.000 44.44
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ANISOU  458   O    GLU  56  3864       8872     4150    93 1013  1011
ATOM    459   CB   GLU  56  -9.403  28.978  64.615 1.000 35.85
ANISOU  459   CB   GLU  56  5037       5109     3475  -221  574  -1821
ATOM    460   CG   GLU  56  -8.192  28.508  65.401 1.000 38.63
ANISOU  460   CG   GLU  56  4804       7152     2721  -337  763  -1692
ATOM    461   CD   GLU  56  -7.395  29.699  65.916 1.000 45.55
ANISOU  461   CD   GLU  56  5576       7183     4546   -24  -295 -2330
ATOM    462   OE1  GLU  56  -7.935  30.828  65.888 1.000 55.54
ANISOU  462   OE1  GLU  56  7344       7247     6512   586  2570 -3059
ATOM    463   OE2  GLU  56  -6.246  29.492  66.350 1.000 50.41
ANISOU  463   OE2  GLU  56  4050      10497     4606 -1066  1163 -2063
ATOM    464   N    HIS  57  -11.890 29.289  62.866 1.000 32.20
ANISOU  464   N    HIS  57  3273       4700     4261  -549  1540  -670
ATOM    465   CA   HIS  57  -13.101 30.078  62.909 1.000 33.38
ANISOU  465   CA   HIS  57  3795       4885     4002  -110  1553 -1239
ATOM    466   C    HIS  57  -13.981 29.873  61.697 1.000 32.85
ANISOU  466   C    HIS  57  3380       4736     4367   278  1506 -1797
ATOM    467   O    HIS  57  -15.012 30.533  61.571 1.000 37.09
ANISOU  467   O    HIS  57  3362       4733     5998   276  1087 -2205
ATOM    468   CB   HIS  57  -12.802 31.573  62.976 1.000 37.39
ANISOU  468   CB   HIS  57  4327       4959     4922  -193  1402 -1970
ATOM    469   CG   HIS  57  -11.981 31.949  64.162 1.000 36.99
ANISOU  469   CG   HIS  57  4111       5046     4896   680  1344 -2319
ATOM    470   ND1  HIS  57  -12.465 31.917  65.453 1.000 38.84
ANISOU  470   ND1  HIS  57  5090       4844     4823  -171  1362 -1598
ATOM    471   CD2  HIS  57  -10.707 32.387  64.232 1.000 37.91
ANISOU  471   CD2  HIS  57  5259       4197     4947  -891  1544 -2828
ATOM    472   CE1  HIS  57  -11.510 32.305  66.275 1.000 40.37
ANISOU  472   CE1  HIS  57  5481       5191     4668  -243  1087 -1361
ATOM    473   NE2  HIS  57  -10.441 32.592  65.552 1.000 35.63
ANISOU  473   NE2  HIS  57  4420       4376     4743   980   799 -1492
ATOM    474   N    GLY  58  -13.464 29.068  60.786 1.000 32.06
ANISOU  474   N    GLY  58  4402       3186     4594     5  1572 -1525
ATOM    475   CA   GLY  58  -14.290 28.731  59.627 1.000 35.74
ANISOU  475   CA   GLY  58  4508       4402     4669 -1129  1877 -1893
ATOM    476   C    GLY  58  -15.449 27.859  60.099 1.000 31.52
ANISOU  476   C    GLY  58  3317       3688     4969   308  1657  -593
ATOM    477   O    GLY  58  -15.245 26.952  60.922 1.000 32.66
ANISOU  477   O    GLY  58  4561       4176     3674  -204   624 -1012
ATOM    478   N    SER  59  -16.632 28.152  59.574 1.000 31.03
ANISOU  478   N    SER  59  3786       3623     4379   519  1142 -1442
ATOM    479   CA   SER  59  -17.823 27.359  59.859 1.000 32.03
ANISOU  479   CA   SER  59  3305       3925     4939   757   850 -1188
ATOM    480   C    SER  59  -17.763 26.034  59.117 1.000 37.27
ANISOU  480   C    SER  59  3654       4001     6507     0  2065 -1682
ATOM    481   O    SER  59  -16.987 25.858  58.181 1.000 31.23
ANISOU  481   O    SER  59  3027       3655     5184   613  1003 -1174
ATOM    482   CB   SER  59  -19.077 28.136  59.444 1.000 39.80
ANISOU  482   CB   SER  59  3930       5925     5266  1707  -545 -2846
ATOM    483   OG   SER  59  -19.252 28.159  58.029 1.000 35.38
ANISOU  483   OG   SER  59  3505       4800     5137   355   119 -1624
ATOM    484   N    GLU  60  -18.589 25.065  59.507 1.000 46.32
ANISOU  484   N    GLU  60  5438       6083     6078 -2395  2115 -2700
ATOM    485   CA   GLU  60  -18.573 23.801  58.754 1.000 34.21
ANISOU  485   CA   GLU  60  3381       4798     4818  -960   716 -1238
ATOM    486   C    GLU  60  -19.033 24.055  57.330 1.000 34.22
ANISOU  486   C    GLU  60  4659       3711     4632   455  1378  -847
ATOM    487   O    GLU  60  -18.616 23.437  56.361 1.000 29.91
ANISOU  487   O    GLU  60  3708       3040     4615  -679  2037  -604
ATOM    488   CB   GLU  60  -19.390 22.742  59.488 1.000 38.26
ANISOU  488   CB   GLU  60  5012       5567     3958 -1599   748 -1000
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ATOM    489  CG  GLU  60    -18.625 22.182  60.678 1.000 42.01
ANISOU  489  CG  GLU  60     5470    5439    5055    503    950  -782
ATOM    490  CD  GLU  60    -17.307 21.528  60.312 1.000 45.34
ANISOU  490  CD  GLU  60     4036    7496    5695   -885   1094 -2276
ATOM    491  OE1 GLU  60    -17.219 20.867  59.264 1.000 49.69
ANISOU  491  OE1 GLU  60     5383    6689    6809   -864   1730 -2838
ATOM    492  OE2 GLU  60    -16.323 21.659  61.084 1.000 43.62
ANISOU  492  OE2 GLU  60     4677    4974    6924  -1984    109   -12
ATOM    493  N   ALA  61    -19.928 25.028  57.167 1.000 34.26
ANISOU  493  N   ALA  61     3091    3912    6014    -81   1209 -1122
ATOM    494  CA  ALA  61    -20.408 25.324  55.823 1.000 33.07
ANISOU  494  CA  ALA  61     1647    4409    6508   -228    657 -1105
ATOM    495  C   ALA  61    -19.314 25.876  54.938 1.000 30.69
ANISOU  495  C   ALA  61     2053    3742    5866    -59    640 -1066
ATOM    496  O   ALA  61    -19.138 25.482  53.790 1.000 31.15
ANISOU  496  O   ALA  61     2754    2893    6189     31    793 -1285
ATOM    497  CB  ALA  61    -21.543 26.336  55.932 1.000 34.43
ANISOU  497  CB  ALA  61     2783    4403    5897    288   1210 -1650
ATOM    498  N   GLU  62    -18.568 26.824  55.498 1.000 28.80
ANISOU  498  N   GLU  62     2168    3404    5371     -9    915  -964
ATOM    499  CA  GLU  62    -17.478 27.395  54.704 1.000 26.78
ANISOU  499  CA  GLU  62     2339    2374    5461    423    871  -413
ATOM    500  C   GLU  62    -16.432 26.330  54.389 1.000 22.61
ANISOU  500  C   GLU  62     2569    1621    4402     84   1049  -376
ATOM    501  O   GLU  62    -15.851 26.316  53.289 1.000 24.41
ANISOU  501  O   GLU  62     2399    2669    4209   -132    801  -548
ATOM    502  CB  GLU  62    -16.861 28.591  55.429 1.000 32.86
ANISOU  502  CB  GLU  62     3129    2117    7239    251   2039 -1358
ATOM    503  CG  GLU  62    -17.739 29.834  55.554 1.000 34.69
ANISOU  503  CG  GLU  62     2824    2859    7499    916    -95 -1430
ATOM    504  CD  GLU  62    -17.274 30.810  56.616 1.000 38.93
ANISOU  504  CD  GLU  62     4998    2780    7014   1622    224 -1820
ATOM    505  OE1 GLU  62    -16.861 30.391  57.717 1.000 40.92
ANISOU  505  OE1 GLU  62     4844    3636    7068   1268     34 -1673
ATOM    506  OE2 GLU  62    -17.324 32.041  56.385 1.000 45.13
ANISOU  506  OE2 GLU  62     7600    2889    6658   -525   1698 -1099
ATOM    507  N   LYS  63    -16.193 25.431  55.345 1.000 25.20
ANISOU  507  N   LYS  63     2470    2380    4723    312   1050    8
ATOM    508  CA  LYS  63    -15.214 24.369  55.207 1.000 21.62
ANISOU  508  CA  LYS  63     2608    2894    2712    688    349  -446
ATOM    509  C   LYS  63    -15.708 23.397  54.147 1.000 22.42
ANISOU  509  C   LYS  63     2930    3038    2549     84    433  -217
ATOM    510  O   LYS  63    -14.913 23.038  53.289 1.000 24.17
ANISOU  510  O   LYS  63     3340    2354    3491    239    782  -790
ATOM    511  CB  LYS  63    -14.940 23.650  56.534 1.000 24.50
ANISOU  511  CB  LYS  63     3411    3057    2842     42   -105  -299
ATOM    512  CG  LYS  63    -13.963 24.465  57.381 1.000 27.58
ANISOU  512  CG  LYS  63     4640    2792    3045   -302   -465  -306
ATOM    513  CD  LYS  63    -13.866 23.937  58.811 1.000 26.09
ANISOU  513  CD  LYS  63     3132    3570    3211    305   -575   -12
ATOM    514  CE  LYS  63    -12.761 24.695  59.560 1.000 28.96
ANISOU  514  CE  LYS  63     4342    3579    3083   -317   -286  -792
ATOM    515  NZ  LYS  63    -12.927 24.614  61.030 1.000 35.00
ANISOU  515  NZ  LYS  63     4884    5356    3057     64   -298  -817
ATOM    516  N   ARG  64    -17.007 23.112  54.143 1.000 29.82
ANISOU  516  N   ARG  64     3238    2676    5418   -533   1111 -1259
ATOM    517  CA  ARG  64    -17.521 22.169  53.118 1.000 25.56
ANISOU  517  CA  ARG  64     2396    2474    4841   -170   1252  -962
ATOM    518  C   ARG  64    -17.417 22.735  51.708 1.000 28.45
ANISOU  518  C   ARG  64     3022    2681    5106    153   1369  -562
ATOM    519  O   ARG  64    -17.149 21.981  50.759 1.000 22.57
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ANISOU  519   O    ARG  64   1672     2466    4436    -71   148  -395
ATOM    520   CB   ARG  64  -18.937 21.809  53.537 1.000 32.48
ANISOU  520   CB   ARG  64   2669     4144    5526   -809  1483 -1029
ATOM    521   CG   ARG  64  -19.094 20.442  54.189 1.000 45.55
ANISOU  521   CG   ARG  64   4444     4749    8116  -2443  1343  -153
ATOM    522   CD   ARG  64  -20.557 19.985  54.080 1.000 59.48
ANISOU  522   CD   ARG  64   5723     6760   10116  -3977 -2863  2461
ATOM    523   NE   ARG  64  -20.759 19.485  52.714 1.000 77.63
ANISOU  523   NE   ARG  64  10254     9303    9938  -4031 -4193  2666
ATOM    524   CZ   ARG  64  -21.166 20.236  51.696 1.000 60.23
ANISOU  524   CZ   ARG  64   5289     6952   10644  -1128 -4334   501
ATOM    525   NH1  ARG  64  -21.424 21.528  51.892 1.000 91.64
ANISOU  525   NH1  ARG  64  18286     5072   11461  -5082 -3134  - 75
ATOM    526   NH2  ARG  64  -21.286 19.711  50.489 1.000 43.67
ANISOU  526   NH2  ARG  64   3318     4095    9178   -183 -1521  2085
ATOM    527   N    ALA  65  -17.624 24.041  51.515 1.000 26.71
ANISOU  527   N    ALA  65   1907     2770    5472    189   936  -556
ATOM    528   CA   ALA  65  -17.522 24.661  50.199 1.000 24.91
ANISOU  528   CA   ALA  65   1798     2379    5288    280   417  -754
ATOM    529   C    ALA  65  -16.109 24.575  49.595 1.000 21.81
ANISOU  529   C    ALA  65   1808     2408    4071    597   155  -626
ATOM    530   O    ALA  65  -15.935 24.724  48.381 1.000 24.13
ANISOU  530   O    ALA  65   2127     3076    3964    224  -220  -485
ATOM    531   CB   ALA  65  -18.023 26.096  50.221 1.000 31.78
ANISOU  531   CB   ALA  65   3096     2984    5993   1337  1401  -453
ATOM    532   N    VAL  66  -15.098 24.306  50.426 1.000 19.29
ANISOU  532   N    VAL  66   1836     1880    3614    466   360  -541
ATOM    533   CA   VAL  66  -13.723 24.167  49.953 1.000 18.17
ANISOU  533   CA   VAL  66   1636     1653    3616    204    79  -487
ATOM    534   C    VAL  66  -13.166 22.767  50.248 1.000 15.18
ANISOU  534   C    VAL  66   1516     1638    2613    120   126  -571
ATOM    535   O    VAL  66  -11.959 22.623  50.353 1.000 17.63
ANISOU  535   O    VAL  66   1567     2071    3060    217  -106  -317
ATOM    536   CB   VAL  66  -12.784 25.277  50.437 1.000 18.91
ANISOU  536   CB   VAL  66   2175     1576    3433    183  -135  -598
ATOM    537   CG1  VAL  66  -13.139 26.627  49.805 1.000 20.60
ANISOU  537   CG1  VAL  66   2067     1751    4010    219   593  - 83
ATOM    538   CG2  VAL  66  -12.736 25.373  51.945 1.000 21.61
ANISOU  538   CG2  VAL  66   2689     2066    3455    102    22  -603
ATOM    539   N    THR  67  -14.048 21.792  50.343 1.000 18.30
ANISOU  539   N    THR  67   1761     1614    3577    -20    -6  -514
ATOM    540   CA   THR  67  -13.673 20.403  50.563 1.000 17.18
ANISOU  540   CA   THR  67   1927     1656    2946    -32    50  -556
ATOM    541   C    THR  67  -13.979 19.566  49.332 1.000 16.52
ANISOU  541   C    THR  67   1763     1742    2773     21    27  -467
ATOM    542   O    THR  67  -15.107 19.613  48.811 1.000 18.13
ANISOU  542   O    THR  67   1750     2211    2929     73   -86  -383
ATOM    543   CB   THR  67  -14.373 19.791  51.782 1.000 18.54
ANISOU  543   CB   THR  67   2202     2014    2827    192   224  -492
ATOM    544   OG1  THR  67  -14.060 20.554  52.961 1.000 20.14
ANISOU  544   OG1  THR  67   2481     2251    2920   -108   155  -468
ATOM    545   CG2  THR  67  -13.912 18.364  52.017 1.000 20.04
ANISOU  545   CG2  THR  67   2393     2016    3203     29   -86  -235
ATOM    546   N    SER  68  -13.030 18.818  48.821 1.000 16.71
ANISOU  546   N    SER  68   1612     1720    3018   -135   154  -498
ATOM    547   CA   SER  68  -13.281 17.947  47.688 1.000 16.33
ANISOU  547   CA   SER  68   1508     1631    3065   -184   365  -561
ATOM    548   C    SER  68  -14.223 16.795  48.057 1.000 14.85
ANISOU  548   C    SER  68   1194     1775    2672    -81   197  -448
ATOM    549   O    SER  68  -14.303 16.431  49.233 1.000 16.36
ANISOU  549   O    SER  68   1783     1775    2659   -145   192  -481
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ATOM    550  CB  SER  68   -11.953 17.303  47.257 1.000 17.84
ANISOU  550  CB  SER  68   1459     2139    3182   -87    647  -313
ATOM    551  OG  SER  68   -10.998 18.259  46.904 1.000 17.21
ANISOU  551  OG  SER  68   1659     1987    2893   -75    364   -49
ATOM    552  N   PRO  69   -14.929 16.284  47.054 1.000 15.89
ANISOU  552  N   PRO  69   1574     1661    2803  -201   -103  -280
ATOM    553  CA  PRO  69   -15.877 15.182  47.339 1.000 16.42
ANISOU  553  CA  PRO  69   1428     1903    2908  -251   -148  -218
ATOM    554  C   PRO  69   -15.168 13.889  47.684 1.000 17.22
ANISOU  554  C   PRO  69   1633     1578    3331  -199    266  -424
ATOM    555  O   PRO  69   -15.794 12.997  48.287 1.000 18.35
ANISOU  555  O   PRO  69   1815     1760    3399  -365    232  -376
ATOM    556  CB  PRO  69   -16.712 15.057  46.060 1.000 16.75
ANISOU  556  CB  PRO  69   1354     2279    2733  -360    155  -729
ATOM    557  CG  PRO  69   -15.799 15.637  45.008 1.000 16.72
ANISOU  557  CG  PRO  69   1553     1971    2827  -359     38  -452
ATOM    558  CD  PRO  69   -15.059 16.797  45.681 1.000 17.10
ANISOU  558  CD  PRO  69   1918     1804    2776  -344   -119  -313
ATOM    559  N   VAL  70   -13.884 13.746  47.366 1.000 18.07
ANISOU  559  N   VAL  70   1716     1764    3384   -89    292  -215
ATOM    560  CA  VAL  70   -13.100 12.594  47.824 1.000 17.34
ANISOU  560  CA  VAL  70   1763     1851    2974   -20    260  -196
ATOM    561  C   VAL  70   -11.995 13.142  48.720 1.000 17.59
ANISOU  561  C   VAL  70   2207     1686    2788  -180    159  -142
ATOM    562  O   VAL  70   -11.431 14.186  48.389 1.000 18.59
ANISOU  562  O   VAL  70   1794     1688    3581   -49    15    2
ATOM    563  CB  VAL  70   -12.429 11.757  46.724 1.000 18.10
ANISOU  563  CB  VAL  70   .1922    1756    3199  -353    560  -446
ATOM    564  CG1 VAL  70   -13.441 10.754  46.213 1.000 20.54
ANISOU  564  CG1 VAL  70   1927     2611    3268  -369     76  -663
ATOM    565  CG2 VAL  70   -11.760 12.608  45.642 1.000 17.65
ANISOU  565  CG2 VAL  70   2379     1806    2520   145      9   10
ATOM    566  N   PRO  71   -11.697 12.466  49.815 1.000 16.21
ANISOU  566  N   PRO  71   1653     1810    2695   -34    464  -156
ATOM    567  CA  PRO  71   -10.839 13.091  50.833 1.000 17.32
ANISOU  567  CA  PRO  71   1795·    1931    2854  -121    184   -12
ATOM    568  C   PRO  71    -9.356 12.804  50.590 1.000 17.67
ANISOU  568  C   PRO  71   1865     1927    2921    46    -57  156
ATOM    569  O   PRO  71    -8.585 12.223  51.350 1.000 20.57
ANISOU  569  O   PRO  71   2218     2247    3350   424     28  474
ATOM    570  CB  PRO  71   -11.362 12.458  52.117 1.000 19.76
ANISOU  570  CB  PRO  71   2976     1862    2668  -347    479  -304
ATOM    571  CG  PRO  71   -11.721 11.056  51.670 1.000 19.08
ANISOU  571  CG  PRO  71   2838     1805    2608  -267    259  -234
ATOM    572  CD  PRO  71   -12.323 11.220  50.286 1.000 17.97
ANISOU  572  CD  PRO  71   2314     1974    2538  -390    451  -167
ATOM    573  N   THR  72    -8.894 13.338  49.446 1.000 17.15
ANISOU  573  N   THR  72   1677     2231    2610  -215    -17  -165
ATOM    574  CA  THR  72    -7.573 13.012  48.935 1.000 16.83
ANISOU  574  CA  THR  72   1721     1863    2810   -60   -134  -472
ATOM    575  C   THR  72    -6.490 14.000  49.358 1.000 15.20
ANISOU  575  C   THR  72   1791     1623    2362  -304    163   -73
ATOM    576  O   THR  72    -5.320 13.729  49.104 1.000 17.49
ANISOU  576  O   THR  72   1776     1961    2908   -61    -31  -225
ATOM    577  CB  THR  72    -7.533 12.971  47.399 1.000 16.18
ANISOU  577  CB  THR  72   1552     1848    2748  -146    -86  -261
ATOM    578  OG1 THR  72    -8.091 14.238  47.005 1.000 17.81
ANISOU  578  OG1 THR  72   1856     1880    3031   -34    115  -191
ATOM    579  CG2 THR  72    -8.338 11.816  46.825 1.000 17.49
ANISOU  579  CG2 THR  72   1953     2087    2605  -550    181  -329
ATOM    580  N   MET  73    -6.877 15.098  49.987 1.000 17.78
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ANISOU  580  N    MET  73    2057    1748    2951    -58   -254  -426
ATOM    581  CA   MET  73   -5.867  16.117  50.394 1.000  16.58
ANISOU  581  CA   MET  73    1796    1708    2797     88   -302  -340
ATOM    582  C    MET  73   -5.073  16.618  49.198 1.000  16.65
ANISOU  582  C    MET  73    1514    1787    3027    241   -162  -420
ATOM    583  O    MET  73   -3.911  17.039  49.292 1.000  19.39
ANISOU  583  O    MET  73    1705    2313    3348   -112   -240  -540
ATOM    584  CB   MET  73   -4.925  15.531  51.469 1.000  20.56
ANISOU  584  CB   MET  73    2099    2629    3083    345   -507  -286
ATOM    585  CG   MET  73   -5.703  15.154  52.715 1.000  30.33
ANISOU  585  CG   MET  73    3008    5133    3384    -69   -609  1027
ATOM    586  SD   MET  73   -4.692  14.263  53.891 1.000  36.13
ANISOU  586  SD   MET  73    4121    5050    4558    336   -918  1596
ATOM    587  CE   MET  73   -3.165  13.987  53.082 1.000  58.07
ANISOU  587  CE   MET  73    2810    8820   10435    975  -1592 -3138
ATOM    588  N    ARG  74   -5.687  16.632  48.025 1.000  16.83
ANISOU  588  N    ARG  74    1699    1714    2982     -6   -211   131
ATOM    589  CA   ARG  74   -5.099  17.215  46.817 1.000  15.87
ANISOU  589  CA   ARG  74    1365    1618    3046    -17     52  -325
ATOM    590  C    ARG  74   -5.359  18.714  46.761 1.000  14.22
ANISOU  590  C    ARG  74    1484    1651    2269    141    -32   -42
ATOM    591  O    ARG  74   -4.472  19.488  46.353 1.000  15.45
ANISOU  591  O    ARG  74    1525    1758    2586    -12    -46   -73
ATOM    592  CB   ARG  74   -5.675  16.530  45.566 1.000  15.68
ANISOU  592  CB   ARG  74    1330    1667    2959    160    -14  -311
ATOM    593  CG   ARG  74   -4.890  16.941  44.299 1.000  16.46
ANISOU  593  CG   ARG  74    1325    1870    3059   -175     55  -395
ATOM    594  CD   ARG  74   -5.655  16.396  43.072 1.000  16.37
ANISOU  594  CD   ARG  74    1789    1533    2899   -181     -8  -177
ATOM    595  NE   ARG  74   -4.840  16.601  41.857 1.000  19.21
ANISOU  595  NE   ARG  74    2289    1990    3020   -142    241  -156
ATOM    596  CZ   ARG  74   -4.944  17.626  41.039 1.000  17.00
ANISOU  596  CZ   ARG  74    1545    2351    2562    -67     26  -147
ATOM    597  NH1  ARG  74   -5.878  18.573  41.213 1.000  18.00
ANISOU  597  NH1  ARG  74    1818    2383    2638     51    -66  -220
ATOM    598  NH2  ARG  74   -4.144  17.703  39.987 1.000  20.50
ANISOU  598  NH2  ARG  74    2285    2972    2532   -110    310  -387
ATOM    599  N    ARG  75   -6.579  19.151  47.101 1.000  15.28
ANISOU  599  N    ARG  75    1755    1544    2507    137    340  -173
ATOM    600  CA   ARG  75   -6.999  20.550  46.980 1.000  14.68
ANISOU  600  CA   ARG  75    1679    1627    2272    236     98  -150
ATOM    601  C    ARG  75   -7.956  20.869  48.122 1.000  14.75
ANISOU  601  C    ARG  75    1445    1747    2414    124    133  -233
ATOM    602  O    ARG  75   -8.760  19.989  48.460 1.000  18.12
ANISOU  602  O    ARG  75    1677    2109    3101   -156    458  -433
ATOM    603  CB   ARG  75   -7.747  20.804  45.668 1.000  15.59
ANISOU  603  CB   ARG  75    1577    2030    2317      1     46  -106
ATOM    604  CG   ARG  75   -6.848  20.634  44.441 1.000  15.63
ANISOU  604  CG   ARG  75    1495    2110    2334      9    147   220
ATOM    605  CD   ARG  75   -5.712  21.618  44.334 1.000  15.59
ANISOU  605  CD   ARG  75    1658    1792    2475     11    130   -10
ATOM    606  NE   ARG  75   -5.061  21.601  43.011 1.000  15.25
ANISOU  606  NE   ARG  75    1421    1779    2596    122    227   144
ATOM    607  CZ   ARG  75   -3.957  20.865  42.732 1.000  14.90
ANISOU  607  CZ   ARG  75    1079    2361    2221     71    -86   242
ATOM    608  NH1  ARG  75   -3.405  20.091  43.664 1.000  16.18
ANISOU  608  NH1  ARG  75    1804    1722    2623   -134   -387   337
ATOM    609  NH2  ARG  75   -3.418  20.940  41.518 1.000  15.83
ANISOU  609  NH2  ARG  75    1677    2107    2232   -193    221     0
ATOM    610  N    GLY  76   -7.895  22.086  48.651 1.000  16.06
ANISOU  610  N    GLY  76    1686    1904    2513    109    220  -464
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ATOM    611  CA  GLY  76   -8.858 22.532 49.637 1.000 16.67
ANISOU  611  CA  GLY  76   1650    2260   2425   -70   199  -612
ATOM    612  C   GLY  76   -8.602 22.002 51.036 1.000 16.32
ANISOU  612  C   GLY  76   1584    2014   2602  -126   268  -347
ATOM    613  O   GLY  76   -7.469 21.651 51.370 1.000 16.87
ANISOU  613  O   GLY  76   1638    1998   2773   -45   308  -218
ATOM    614  N   PHE  77   -9.643 22.025 51.863 1.000 16.88
ANISOU  614  N   PHE  77   1597    2141   2675    -7   283  -191
ATOM    615  CA  PHE  77   -9.584 21.646 53.274 1.000 17.61
ANISOU  615  CA  PHE  77   1838    2196   2656   109   328  -114
ATOM    616  C   PHE  77   -9.776 20.154 53.512 1.000 17.64
ANISOU  616  C   PHE  77   1855    2248   2600   -68   243  -185
ATOM    617  O   PHE  77  -10.589 19.528 52.831 1.000 18.23
ANISOU  617  O   PHE  77   1844    2488   2594  -183   357  -240
ATOM    618  CB  PHE  77  -10.698 22.383 53.998 1.000 17.70
ANISOU  618  CB  PHE  77   1730    2515   2480   162    65  -344
ATOM    619  CG  PHE  77  -10.877 22.081 55.473 1.000 19.61
ANISOU  619  CG  PHE  77   2405    2530   2515   195   261  -516
ATOM    620  CD1 PHE  77   -9.966 22.594 56.395 1.000 22.27
ANISOU  620  CD1 PHE  77   2514    3523   2426   431   -23  -527
ATOM    621  CD2 PHE  77  -11.917 21.285 55.941 1.000 21.31
ANISOU  621  CD2 PHE  77   3282    2070   2743    36   615  -288
ATOM    622  CE1 PHE  77  -10.116 22.294 57.742 1.000 21.05
ANISOU  622  CE1 PHE  77   2719    2768   2510   171   221  -339
ATOM    623  CE2 PHE  77  -12.079 20.991 57.300 1.000 25.09
ANISOU  623  CE2 PHE  77   2967    4120   2447  -501   625  -826
ATOM    624  CZ  PHE  77  -11.175 21.523 58.207 1.000 23.79
ANISOU  624  CZ  PHE  77   2263    3681   3095    -1   376  -756
ATOM    625  N   THR  78   -9.022 19.631 54.490 1.000 17.64
ANISOU  625  N   THR  78   1616    2161   2925    37   336    1
ATOM    626  CA  THR  78   -9.296 18.279 54.983 1.000 18.12
ANISOU  626  CA  THR  78   1926    2243   2717  -157   624   -28
ATOM    627  C   THR  78   -9.291 18.316 56.505 1.000 18.66
ANISOU  627  C   THR  78   2120    2308   2663  -367   519  -288
ATOM    628  O   THR  78   -8.335 18.821 57.095 1.000 21.42
ANISOU  628  O   THR  78   2158    2883   3098  -432    90  177
ATOM    629  CB  THR  78   -8.252 17.242 54.521 1.000 21.00
ANISOU  629  CB  THR  78   2973    2067   2939   113   428  -574
ATOM    630  OG1 THR  78   -8.027 17.392 53.104 1.000 21.18
ANISOU  630  OG1 THR  78   2544    2671   2833   160   317  -773
ATOM    631  CG2 THR  78   -8.735 15.832 54.800 1.000 26.65
ANISOU  631  CG2 THR  78   3759    2227   4141  -275   853  -618
ATOM    632  N   GLY  79  -10.311 17.804 57.181 1.000 20.36
ANISOU  632  N   GLY  79   2669    2379   2690  -670   630  -144
ATOM    633  CA  GLY  79  -10.344 17.679 58.623 1.000 25.96
ANISOU  633  CA  GLY  79   3871    3249   2745  -790   576  375
ATOM    634  C   GLY  79  -10.029 16.238 59.039 1.000 39.70
ANISOU  634  C   GLY  79   6407    3542   5135 -1658 -1944 1511
ATOM    635  O   GLY  79  -10.623 15.303 58.491 1.000 31.02
ANISOU  635  O   GLY  79   4327    3187   4272  -404   419   -75
ATOM    636  N   LEU  80   -9.069 16.055 59.936 1.000 36.07
ANISOU  636  N   LEU  80   4380    4536   4788  1381  -564 -835
ATOM    637  CA  LEU  80   -8.634 14.713 60.340 1.000 32.52
ANISOU  637  CA  LEU  80   3640    4083   4632   611  -502 -898
ATOM    638  C   LEU  80   -9.131 14.311 61.716 1.000 39.82
ANISOU  638  C   LEU  80   5051    4652   5428  -128   418  -538
ATOM    639  O   LEU  80   -9.998 14.963 62.305 1.000 37.05
ANISOU  639  O   LEU  80   5057    3807   5213  -292   666   87
ATOM    640  CB  LEU  80   -7.122 14.580 60.265 1.000 38.36
ANISOU  640  CB  LEU  80   3821    5456   5299  1568   -33 -1406
ATOM    641  CG  LEU  80   -6.488 14.753 58.883 1.000 38.27
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ANISOU  641  CG   LEU   80    3714      5900      4926      725    -288  -2589
ATOM    642  CD1  LEU   80   -5.007   14.359   58.948  1.000  45.41
ANISOU  642  CD1  LEU   80    2579      8505      6170    -1092    -76    3 7
ATOM    643  CD2  LEU   80   -7.170   13.856   57.854  1.000  40.75
ANISOU  643  CD2  LEU   80    4296      5601      5587      872   -1965  -1793
ATOM    644  N    SER   98   -6.459   17.442   63.930  1.000  36.72
ANISOU  644  N    SER   98    3404      6429      4118    -2114   -698  1948
ATOM    645  CA   SER   98   -5.629   17.877   62.824  1.000  39.59
ANISOU  645  CA   SER   98    6031      5376      3635     -449    383  2177
ATOM    646  C    SER   98   -6.402   18.372   61.610  1.000  29.89
ANISOU  646  C    SER   98    3806      3509      4040      141    640  1204
ATOM    647  O    SER   98   -7.474   17.856   61.304  1.000  38.27
ANISOU  647  O    SER   98    4936      4300      5303    -1107    395   885
ATOM    648  CB   SER   98   -4.694   16.739   62.358  1.000  44.06
ANISOU  648  CB   SER   98    3175      7425      6141      633    -753  2704
ATOM    649  OG   SER   98   -3.672   17.368   61.583  1.000  46.84
ANISOU  649  OG   SER   98    3497      6502      7797       95   -408  2418
ATOM    650  N    MET   99   -5.829   19.317   60.869  1.000  28.56
ANISOU  650  N    MET   99    5029      3458      2365    -1080   -550  546
ATOM    651  CA   MET   99   -6.426   19.941   59.700  1.000  21.44
ANISOU  651  CA   MET   99    2284      3549      2315     -182    157  132
ATOM    652  C    MET   99   -5.376   20.229   58.624  1.000  19.16
ANISOU  652  C    MET   99    2306      2592      2382     -433     60  137
ATOM    653  O    MET   99   -4.232   20.575   58.930  1.000  23.34
ANISOU  653  O    MET   99    2489      3920      2460     -773    225  -410
ATOM    654  CB   MET   99   -7.164   21.209   60.105  1.000  25.20
ANISOU  654  CB   MET   99    3172      3375      3028     -572    661  -547
ATOM    655  CG   MET   99   -8.481   20.965   60.872  1.000  25.85
ANISOU  655  CG   MET   99    3172      3862      2787     -275    739  -782
ATOM    656  SD   MET   99   -9.251   22.517   61.389  1.000  32.21
ANISOU  656  SD   MET   99    4405      3750      4083     -133   1580  -568
ATOM    657  CE   MET   99   -8.884   22.461   63.145  1.000  76.12
ANISOU  657  CE   MET   99   14782     11538      2603    -3321   3478  -3241
ATOM    658  N    CYS  100   -5.778   20.094   57.361  1.000  18.85
ANISOU  658  N    CYS  100    2434      2443      2285     -160     93  194
ATOM    659  CA   CYS  100   -4.868   20.333   56.234  1.000  18.55
ANISOU  659  CA   CYS  100    2251      2380      2418       92    127  236
ATOM    660  C    CYS  100   -5.496   21.312   55.228  1.000  16.26
ANISOU  660  C    CYS  100    1826      2031      2321      110    329    2
ATOM    661  O    CYS  100   -6.728   21.308   55.071  1.000  17.69
ANISOU  661  O    CYS  100    1741      2395      2586      -69    154  -104
ATOM    662  CB   CYS  100   -4.604   18.982   55.545  1.000  18.46
ANISOU  662  CB   CYS  100    2822      2081      2111       98    118  511
ATOM    663  SG   CYS  100   -3.243   18.974   54.329  1.000  22.76
ANISOU  663  SG   CYS  100    2622      2968      3058      307    391    1 0
ATOM    664  N    TYR  101   -4.697   22.069   54.498  1.000  17.49
ANISOU  664  N    TYR  101    1839      2473      2332       46    291  224
ATOM    665  CA   TYR  101   -5.117   22.874   53.373  1.000  15.38
ANISOU  665  CA   TYR  101    1946      1939      1960      -50     90  -262
ATOM    666  C    TYR  101   -4.102   22.594   52.245  1.000  13.65
ANISOU  666  C    TYR  101    1676      1543      1967       -2   -123  -151
ATOM    667  O    TYR  101   -2.896   22.629   52.475  1.000  15.95
ANISOU  667  O    TYR  101    1611      2231      2217      -43   -232  -212
ATOM    668  CB   TYR  101   -5.122   24.382   53.739  1.000  19.02
ANISOU  668  CB   TYR  101    2816      2082      2328      234     48  -519
ATOM    669  CG   TYR  101   -5.617   25.109   52.498  1.000  17.85
ANISOU  669  CG   TYR  101    2084      1895      2804       18    -26  -231
ATOM    670  CD1  TYR  101   -6.964   25.134   52.171  1.000  18.25
ANISOU  670  CD1  TYR  101    2042      1596      3298       29     28  -496
ATOM    671  CD2  TYR  101   -4.730   25.778   51.658  1.000  17.77
ANISOU  671  CD2  TYR  101    2037      1611      3106      -46   -125  -127
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ATOM     672   CE1  TYR   101   -7.406   25.796   51.036  1.000  19.63
ANISOU   672   CE1  TYR   101   1977     1776     3704      88  -241  -221
ATOM     673   CE2  TYR   101   -5.147   26.386   50.478  1.000  20.46
ANISOU   673   CE2  TYR   101   2060     2608     3108     239    40  182
ATOM     674   CZ   TYR   101   -6.504   26.392   50.166  1.000  20.29
ANISOU   674   CZ   TYR   101   2187     2397     3127     -73  -353  -260
ATOM     675   OH   TYR   101   -6.932   26.995   49.000  1.000  23.34
ANISOU   675   OH   TYR   101   2790     2555     3523      -3  -641    52
ATOM     676   N    SER   102   -4.648   22.210   51.097  1.000  14.60
ANISOU   676   N    SER   102   1618     1890     2041     -61  -109  -477
ATOM     677   CA   SER   102   -3.797   21.792   49.980  1.000  14.52
ANISOU   677   CA   SER   102   1684     1802     2030    -108    62  -276
ATOM     678   C    SER   102   -4.011   22.670   48.747  1.000  14.99
ANISOU   678   C    SER   102   1545     1790     2361    -296   -41    21
ATOM     679   O    SER   102   -5.167   23.105   48.477  1.000  16.73
ANISOU   679   O    SER   102   1589     2342     2425       2   128    -3
ATOM     680   CB   SER   102   -4.163   20.340   49.593  1.000  13.82
ANISOU   680   CB   SER   102   1692     1548     2013     174     9  -138
ATOM     681   OG   SER   102   -3.996   19.476   50.720  1.000  16.06
ANISOU   681   OG   SER   102   1886     2066     2153      97  -121    63
ATOM     682   N    MET   103   -2.978   22.775   47.920  1.000  14.47
ANISOU   682   N    MET   103   1568     1724     2206      51   -59  152
ATOM     683   CA   MET   103   -3.102   23.552   46.687  1.000  16.58
ANISOU   683   CA   MET   103   2194     1933     2173     331   -74   253
ATOM     684   C    MET   103   -2.150   23.013   45.608  1.000  14.41
ANISOU   684   C    MET   103   1598     1793     2083    -202  -210    63
ATOM     685   O    MET   103   -1.157   22.347   45.920  1.000  16.24
ANISOU   685   O    MET   103   1527     2384     2259     -61   -23   468
ATOM     686   CB   MET   103   -2.716   25.004   46.835  1.000  28.78
ANISOU   686   CB   MET   103   6537     1318     3081     859  -207  366
ATOM     687   CG   MET   103   -3.258   25.986   47.801  1.000  22.60
ANISOU   687   CG   MET   103   2531     2157     3900    -161   -57  -291
ATOM     688   SD   MET   103   -2.338   27.505   47.506  1.000  20.60
ANISOU   688   SD   MET   103   2499     1927     3400      -4  -164  -226
ATOM     689   CE   MET   103   -2.587   27.945   45.804  1.000  21.63
ANISOU   689   CE   MET   103   2319     2601     3300     308   209  -236
ATOM     690   N    GLY   104   -2.439   23.430   44.378  1.000  15.44
ANISOU   690   N    GLY   104   1468     2228     2169     -68  -120  164
ATOM     691   CA   GLY   104   -1.511   23.199   43.276  1.000  16.13
ANISOU   691   CA   GLY   104   1688     2202     2241      42    65  469
ATOM     692   C    GLY   104   -1.583   24.355   42.294  1.000  15.76
ANISOU   692   C    GLY   104   1706     1997     2286     -32  -194  388
ATOM     693   O    GLY   104   -1.987   25.478   42.653  1.000  19.06
ANISOU   693   O    GLY   104   1953     2032     3256     -71   144   333
ATOM     694   N    THR   105   -1.151   24.092   41.054  1.000  16.73
ANISOU   694   N    THR   105   1685     2385     2287    -375   -55   515
ATOM     695   CA   THR   105   -1.115   25.205   40.094  1.000  17.06
ANISOU   695   CA   THR   105   1725     2390     2369    -231  -148  577
ATOM     696   C    THR   105   -2.513   25.631   39.635  1.000  19.55
ANISOU   696   C    THR   105   1768     1817     3842    -160  -346  525
ATOM     697   O    THR   105   -2.680   26.703   39.059  1.000  22.41
ANISOU   697   O    THR   105   2262     2116     4136    -119  -520  842
ATOM     698   CB   THR   105   -0.301   24.857   38.840  1.000  17.57
ANISOU   698   CB   THR   105   1759     2877     2038    -394  -343  377
ATOM     699   OG1  THR   105   -0.865   23.675   38.217  1.000  18.66
ANISOU   699   OG1  THR   105   2035     2449     2607    -140  -458  416
ATOM     700   CG2  THR   105    1.155   24.590   39.178  1.000  18.95
ANISOU   700   CG2  THR   105   1748     2853     2601    -105  -248  296
ATOM     701   N    ALA   106   -3.507   24.751   39.741  1.000  16.52
ANISOU   701   N    ALA   106   1596     2293     2389    -180    -1  298
ATOM     702   CA   ALA   106   -4.846   25.035   39.218  1.000  16.59
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ANISOU 702   CA   ALA   106  1692        1952       2660    -214  -209 2 4 3
ATOM   703   C    ALA   106  -5.848  24.142  39.923 1.000 17.52
ANISOU 703   C    ALA   106  1651        1821       3186      26  -66 5 5 5
ATOM   704   O    ALA   106  -5.479  23.323  40.805 1.000 17.88
ANISOU 704   O    ALA   106  2038        2087       2668      59  -51 3 8 8
ATOM   705   CB   ALA   106  -4.862  24.838  37.713 1.000 20.31
ANISOU 705   CB   ALA   106  2331        2764       2620    -197  -403 4 4 0
ATOM   706   N    ASP   107  -7.149  24.329  39.717 1.000 18.00
ANISOU 706   N    ASP   107  1576        2208       3057     -77  -120 4 9
ATOM   707   CA   ASP   107  -8.217  23.535  40.344 1.000 17.46
ANISOU 707   CA   ASP   107  1563        2191       2881     -83  -472 3 6 3
ATOM   708   C    ASP   107  -8.173  23.753  41.859 1.000 17.74
ANISOU 708   C    ASP   107  1825        2044       2869     447  -269 3 6 2
ATOM   709   O    ASP   107  -8.458  22.854  42.650 1.000 18.95
ANISOU 709   O    ASP   107  1994        2230       2974     167  -133 4 0 2
ATOM   710   CB   ASP   107  -8.089  22.044  39.990 1.000 19.62
ANISOU 710   CB   ASP   107  2213        2300       2942    -394  -727 1 7 3
ATOM   711   CG   ASP   107  -8.370  21.842  38.508 1.000 20.81
ANISOU 711   CG   ASP   107  1952        3093       2862    -138  -532 - 1 4
ATOM   712   OD1  ASP   107  -9.369  22.369  37.976 1.000 25.84
ANISOU 712   OD1  ASP   107  2524        3967       3327     222  -1149 - 2 4 0
ATOM   713   OD2  ASP   107  -7.544  21.168  37.844 1.000 25.86
ANISOU 713   OD2  ASP   107  3314        2989       3523     391   -91 - 8 9
ATOM   714   N    ASN   108  -7.893  24.962  42.298 1.000 18.18
ANISOU 714   N    ASN   108  2049        2075       2786     509   189 1 5 3
ATOM   715   CA   ASN   108  -7.831  25.263  43.740 1.000 17.10
ANISOU 715   CA   ASN   108  1804        1977       2715     266   291 3 2 7
ATOM   716   C    ASN   108  -9.158  25.716  44.314 1.000 17.11
ANISOU 716   C    ASN   108  1705        2061       2734     367    44 1 4 9
ATOM   717   O    ASN   108  -10.103 26.086  43.604 1.000 20.72
ANISOU 717   O    ASN   108  2066        2377       3430     759  -248 2 4 5
ATOM   718   CB   ASN   108  -6.799  26.379  43.969 1.000 19.90
ANISOU 718   CB   ASN   108  1770        2308       3483     186   298 - 1 7 1
ATOM   719   CG   ASN   108  -5.400  25.862  43.717 1.000 17.24
ANISOU 719   CG   ASN   108  1709        2212       2628     200    68 1 8 4
ATOM   720   OD1  ASN   108  -4.986  24.850  44.277 1.000 17.42
ANISOU 720   OD1  ASN   108  2003        1984       2631     109    11 - 6 2
ATOM   721   ND2  ASN   108  -4.644  26.487  42.834 1.000 18.41
ANISOU 721   ND2  ASN   108  2083        2326       2587     -82   300 - 1 8
ATOM   722   N    LEU   109  -9.308  25.509  45.607 1.000 18.09
ANISOU 722   N    LEU   109  1795        2294       2786     349   344 1 0
ATOM   723   CA   LEU   109  -10.532 25.803  46.369 1.000 19.11
ANISOU 723   CA   LEU   109  1763        2200       3296      14   476 - 5 9 8
ATOM   724   C    LEU   109  -10.169 26.790  47.457 1.000 17.40
ANISOU 724   C    LEU   109  1682        1937       2990     251   129 - 2 0 7
ATOM   725   O    LEU   109  -9.443  26.423  48.395 1.000 21.18
ANISOU 725   O    LEU   109  2443        1922       3684     174  -520 2
ATOM   726   CB   LEU   109  -11.100 24.504  46.940 1.000 17.10
ANISOU 726   CB   LEU   109  1888        2142       2469     199   426  - 6 3 0
ATOM   727   CG   LEU   109  -11.520 23.425  45.944 1.000 18.07
ANISOU 727   CG   LEU   109  2515        1943       2409     190  -198 - 3 6 3
ATOM   728   CD1  LEU   109  -11.895 22.124  46.654 1.000 20.06
ANISOU 728   CD1  LEU   109  2842        2406       2375    -331  -175 - 2 0 0
ATOM   729   CD2  LEU   109  -12.630 23.908  45.035 1.000 25.24
ANISOU 729   CD2  LEU   109  3481        2892       3217     306  -992 -111
ATOM   730   N    PHE   110  -10.609 28.036  47.313 1.000 17.25
ANISOU 730   N    PHE   110  1584        1926       3045     272   184 - 1 3 2
ATOM   731   CA   PHE   110  -10.235 29.071  48.277 1.000 18.20
ANISOU 731   CA   PHE   110  1751        1816       3346     169   221  - 1 6 0
ATOM   732   C    PHE   110  -11.409 29.567  49.106 1.000 19.93
ANISOU 732   C    PHE   110  2077        1609       3886      71   650 - 3 3 5
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ATOM     733  O   PHE   110  -12.433  29.948  48.494  1.000  24.64
ANISOU   733  O   PHE   110  2051     2461    4851    612    328    -779
ATOM     734  CB  PHE   110  -9.607   30.243  47.520  1.000  19.92
ANISOU   734  CB  PHE   110  2367     1876    3324    224    619    -93
ATOM     735  CG  PHE   110  -8.380   29.986  46.688  1.000  19.47
ANISOU   735  CG  PHE   110  2009     2209    3179    -321   327    -791
ATOM     736  CD1 PHE   110  -7.177   29.680  47.287  1.000  20.59
ANISOU   736  CD1 PHE   110  2071     2080    3674    -274   236    -331
ATOM     737  CD2 PHE   110  -8.437   30.035  45.299  1.000  20.19
ANISOU   737  CD2 PHE   110  2557     1914    3200    112    543    -289
ATOM     738  CE1 PHE   110  -6.034   29.454  46.559  1.000  21.06
ANISOU   738  CE1 PHE   110  2020     2309    3673    -386   165    -622
ATOM     739  CE2 PHE   110  -7.277   29.811  44.547  1.000  20.77
ANISOU   739  CE2 PHE   110  2495     2138    3257    197    504    -398
ATOM     740  CZ  PHE   110  -6.081   29.518  45.175  1.000  22.42
ANISOU   740  CZ  PHE   110  2747     2092    3678    531    339    -357
ATOM     741  N   PRO   111  -11.238  29.718  50.416  1.000  22.11
ANISOU   741  N   PRO   111  2250     2153    3996    -72    871    -620
ATOM     742  CA  PRO   111  -12.287  30.389  51.195  1.000  28.23
ANISOU   742  CA  PRO   111  3895     2210    4621    698    1514   -671
ATOM     743  C   PRO   111  -12.333  31.866  50.784  1.000  30.57
ANISOU   743  C   PRO   111  4528     2026    5061    410    410    -1041
ATOM     744  O   PRO   111  -11.390  32.340  50.115  1.000  31.71
ANISOU   744  O   PRO   111  4040     2236    5774    -179   -597   -12
ATOM     745  CB  PRO   111  -11.799  30.250  52.627  1.000  33.20
ANISOU   745  CB  PRO   111  5609     2702    4303    671    1671   -790
ATOM     746  CG  PRO   111  -10.646  29.326  52.647  1.000  26.04
ANISOU   746  CG  PRO   111  2742     3316    3835    -931   1324   -192
ATOM     747  CD  PRO   111  -10.161  29.149  51.230  1.000  22.15
ANISOU   747  CD  PRO   111  2587     2307    3522    -471   541    -623
ATOM     748  N   SER   112  -13.337  32.641  51.150  1.000  42.13
ANISOU   748  N   SER   112  7176     2716    6115    2074   1731   -526
ATOM     749  CA  SER   112  -13.368  34.026  50.672  1.000  44.05
ANISOU   749  CA  SER   112  6799     2255    7684    1107   -485   -826
ATOM     750  C   SER   112  -13.262  34.157  49.149  1.000  68.28
ANISOU   750  C   SER   112  13632    4498.   7812    -1855  -2077  1301
ATOM     751  O   SER   112  -12.347  34.825  48.646  1.000  95.18
ANISOU   751  O   SER   112  15991    11425   8747    -4337  -70    1985
ATOM     752  CB  SER   112  -12.493  35.069  51.349  1.000  39.31
ANISOU   752  CB  SER   112  2247     4535    8153    580    1662   -1437
ATOM     753  OG  SER   112  -11.474  34.624  52.213  1.000  37.49
ANISOU   753  OG  SER   112  7213     2453    4579    806    747    -1152
ATOM     754  N   ASP   114  -9.515   37.322  49.945  1.000  36.40
ANISOU   754  N   ASP   114  3476     2118    8237    1254   403    1484
ATOM     755  CA  ASP   114  -8.205   37.586  50.600  1.000  30.79
ANISOU   755  CA  ASP   114  3503     2856    5340    1229   1240   996
ATOM     756  C   ASP   114  -7.242   36.402  50.648  1.000  26.16
ANISOU   756  C   ASP   114  2581     2404    4955    601    1114   804
ATOM     757  O   ASP   114  -6.031   36.458  50.338  1.000  25.45
ANISOU   757  O   ASP   114  2302     2503    4866    -43    602    131
ATOM     758  CB  ASP   114  -8.595   37.874  52.075  1.000  43.68
ANISOU   758  CB  ASP   114  7509     2783    6304    1157   2727   -210
ATOM     759  CG  ASP   114  -7.391   38.386  52.835  1.000  46.96
ANISOU   759  CG  ASP   114  9259     3225    5359    2517   519    107
ATOM     760  OD1 ASP   114  -6.487   38.959  52.189  1.000  83.49
ANISOU   760  OD1 ASP   114  13724    9866    8132    -6354  650    -3056
ATOM     761  OD2 ASP   114  -7.370   38.262  54.071  1.000 113.59
ANISOU   761  OD2 ASP   114  27880    10550   4730    -6984  -159   -2575
ATOM     762  N   PHE   115  -7.831   35.323  51.153  1.000  22.32
ANISOU   762  N   PHE   115  2620     2062    3799    204    954    -114
ATOM     763  CA  PHE   115  -7.115   34.026  51.183  1.000  22.69
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ANISOU  763  CA  PHE  115  2765            1909    3947   118  1093 -187
ATOM    764  C   PHE  115  -6.502  33.754  49.816  1.000  21.49
ANISOU  764  C   PHE  115  2146            2316    3702   305   559  -255
ATOM    765  O   PHE  115  -5.328  33.362  49.758  1.000  20.51
ANISOU  765  O   PHE  115  2153            2011    3627   323   488  -158
ATOM    766  CB  PHE  115  -8.096  32.928  51.638  1.000  20.76
ANISOU  766  CB  PHE  115  2369            1946    3574    -3   563  -473
ATOM    767  CG  PHE  115  -7.496  31.590  51.998  1.000  20.23
ANISOU  767  CG  PHE  115  2369            1854    3463  -155   629  -377
ATOM    768  CD1 PHE  115  -6.915  30.756  51.041  1.000  20.35
ANISOU  768  CD1 PHE  115  2572            1786    3372  -195   112  -756
ATOM    769  CD2 PHE  115  -7.474  31.152  53.309  1.000  21.11
ANISOU  769  CD2 PHE  115  2802            1932    3287  -113    17  -689
ATOM    770  CE1 PHE  115  -6.351  29.538  51.325  1.000  21.09
ANISOU  770  CE1 PHE  115  2502            1728    3784  -295   471  -538
ATOM    771  CE2 PHE  115  -6.938  29.901  53.623  1.000  27.40
ANISOU  771  CE2 PHE  115  5012            1955    3445   444    43  -572
ATOM    772  CZ  PHE  115  -6.332  29.110  52.655  1.000  24.92
ANISOU  772  CZ  PHE  115  3356            1889    4222    50  1519   221
ATOM    773  N   GLU  116  -7.301  33.768  48.757  1.000  21.64
ANISOU  773  N   GLU  116  2396            1835    3990   338   261   -13
ATOM    774  CA  GLU  116  -6.750  33.424  47.444  1.000  20.90
ANISOU  774  CA  GLU  116  2235            1965    3742   224    74   116
ATOM    775  C   GLU  116  -5.550  34.262  47.054  1.000  20.32
ANISOU  775  C   GLU  116  1978            1899    3845   439  -108   448
ATOM    776  O   GLU  116  -4.544  33.679  46.604  1.000  20.18
ANISOU  776  O   GLU  116  2209            2147    3312   424    73   139
ATOM    777  CB  GLU  116  -7.851  33.561  46.385  1.000  24.22
ANISOU  777  CB  GLU  116  2425            2638    4139  -467  -237   519
ATOM    778  CG  GLU  116  -7.339  33.331  44.980  1.000  23.27
ANISOU  778  CG  GLU  116  2425            2465    3952    -7  -494   750
ATOM    779  CD  GLU  116  -8.401  33.273  43.910  1.000  25.02
ANISOU  779  CD  GLU  116  2695            2703    4107  -510  -739  1509
ATOM    780  OE1 GLU  116  -9.617  33.306  44.207  1.000  34.83
ANISOU  780  OE1 GLU  116  2466            4606    6161  -203  -928  1566
ATOM    781  OE2 GLU  116  -8.001  33.030  42.763  1.000  40.92
ANISOU  781  OE2 GLU  116  4389            7172    3988   -24  -968   693
ATOM    782  N   ARG  117  -5.549  35.571  47.300  1.000  20.60
ANISOU  782  N   ARG  117  2299            1811    3718   382   -10   469
ATOM    783  CA  ARG  117  -4.374  36.374  46.866  1.000  22.65
ANISOU  783  CA  ARG  117  2230            1791    4586   351   107   153
ATOM    784  C   ARG  117  -3.163  35.911  47.648  1.000  21.87
ANISOU  784  C   ARG  117  2269            1865    4178   252   179     7
ATOM    785  O   ARG  117  -2.060  35.789  47.102  1.000  22.10
ANISOU  785  O   ARG  117  2197            2270    3931   216    41   205
ATOM    786  CB  ARG  117  -4.682  37.861  47.105  1.000  29.47
ANISOU  786  CB  ARG  117  2849            1691    6658   259  -555    -1
ATOM    787  CG  ARG  117  -3.485  38.815  47.046  1.000  40.24
ANISOU  787  CG  ARG  117  3905            2567    8818  -819 -1330  -476
ATOM    788  CD  ARG  117  -3.745  40.160  47.716  1.000  52.75
ANISOU  788  CD  ARG  117  4698            2848   12496  -595 -1653 -1669
ATOM    789  NE  ARG  117  -3.934  39.987  49.155  1.000  68.00
ANISOU  789  NE  ARG  117  8247            4719   12872   422  1842 -3441
ATOM    790  CZ  ARG  117  -3.166  40.448  50.126  1.000  78.38
ANISOU  790  CZ  ARG  117  13026           5658   11097   283   448 -2498
ATOM    791  NH1 ARG  117  -2.097  41.186  49.849  1.000  89.01
ANISOU  791  NH1 ARG  117  14218          11488    8115 -3550 -6761  3577
ATOM    792  NH2 ARG  117  -3.479  40.189  51.391  1.000  82.58
ANISOU  792  NH2 ARG  117  16575           2856   11947  2617  2551 -2095
ATOM    793  N   ILE  118  -3.334  35.759  48.954  1.000  21.70
ANISOU  793  N   ILE  118  2319            1797    4127   311   271  -314
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ATOM    794  CA  ILE  118 -2.206  35.425  49.810 1.000 20.99
ANISOU  794  CA  ILE  118 2546    1624    3805    408    294  -470
ATOM    795  C   ILE  118 -1.596  34.073  49.475 1.000 18.79
ANISOU  795  C   ILE  118 2222    1534    3384    218    573  -201
ATOM    796  O   ILE  118 -0.409  33.858  49.323 1.000 17.27
ANISOU  796  O   ILE  118 2194    1663    2707    283    351  -136
ATOM    797  CB  ILE  118 -2.588  35.542  51.293 1.000 22.62
ANISOU  797  CB  ILE  118 2702    1997    3895    276    416  -856
ATOM    798  CG1 ILE  118 -2.916  36.995  51.700 1.000 27.54
ANISOU  798  CG1 ILE  118 5077    1801    3587    503    768  -401
ATOM    799  CG2 ILE  118 -1.552  34.940  52.206 1.000 23.59
ANISOU  799  CG2 ILE  118 3084    2274    3606    183    254  -818
ATOM    800  CD1 ILE  118 -3.493  37.115  53.096 1.000 29.35
ANISOU  800  CD1 ILE  118 5212    2054    3885    558   1114  -645
ATOM    801  N   TRP  119 -2.454  33.069  49.341 1.000 17.93
ANISOU  801  N   TRP  119 2378    1605    2828    147    -80  -269
ATOM    802  CA  TRP  119 -2.035  31.688  49.103 1.000 16.57
ANISOU  802  CA  TRP  119 2126    1538    2630    152    -25   -16
ATOM    803  C   TRP  119 -1.575  31.476  47.676 1.000 16.98
ANISOU  803  C   TRP  119 2126    1723    2604    269    -91   -51
ATOM    804  O   TRP  119 -0.700  3C.640  47.455 1.000 17.58
ANISOU  804  O   TRP  119 1892    1674    3113    135    181   6 3
ATOM    805  CB  TRP  119 -3.127  30.690  49.591 1.000 18.32
ANISOU  805  CB  TRP  119 2156    1789    3014    -34     5   - 7
ATOM    806  CG  TRP  119 -2.934  30.457  51.082 1.000 18.27
ANISOU  806  CG  TRP  119 2208    1711    3025    86 349 5 6
ATOM    807  CD1 TRP  119 -3.354  31.273  52.103 1.000 20.36
ANISOU  807  CD1 TRP  119 2624    2029    3083    156    276  -153
ATOM    808  CD2 TRP  119 -2.213  29.383  51.683 1.000 18.61
ANISOU  808  CD2 TRP  119 2049    2055    2967    134    263   1 1 0
ATOM    809  NE1 TRP  119 -2.955  30.773  53.323 1.000 20.55
ANISOU  809  NE1 TRP  119 2471    2229    3109    92 266  -106
ATOM    810  CE2 TRP  119 -2.260  29.603  53.073 1.000 20.21
ANISOU  810  CE2 TRP  119 2529    2258    2893    180    754   2 9 7
ATOM    811  CE3 TRP  119 -1.576  28.258  51.147 1.000 18.29
ANISOU  811  CE3 TRP  119 2258    1714    2977    42 -70 - 2 0
ATOM    812  CZ2 TRP  119 -1.636  28.728  53.981 1.000 21.97
ANISOU  812  CZ2 TRP  119 2876    2526    2945    384    51  -106
ATOM    813  CZ3 TRP  119 -0.968  27.375  52.045 1.000 19.35
ANISOU  813  CZ3 TRP  119 2576    2028    2750    187    415   2 9 9
ATOM    814  CH2 TRP  119 -1.026  27.618  53.442 1.000 21.67
ANISOU  814  CH2 TRP  119 3033    2379    2823    350    250   9 7
ATOM    815  N   THR  120 -2.129  32.192  46.701 1.000 16.93
ANISOU  815  N   THR  120 2023    1833    2577    122   -112 1 8
ATOM    816  CA  THR  120 -1.598  32.086  45.342 1.000 17.85
ANISOU  816  CA  THR  120 1915    2469    2398    222   -371 - 3 2 4
ATOM    817  C   THR  120 -0.169  32.587  45.288 1.000 17.15
ANISOU  817  C   THR  120 2031    1855    2629    241   -155 1 9 2
ATOM    818  O   THR  120 0.700   31.960  44.674 1.000 18.67
ANISOU  818  O   THR  120 1996    1887    3212    389   -131 1 7 7
ATOM    819  CB  THR  120 -2.487  32.865  44.344 1.000 18.10
ANISOU  819  CB  THR  120 1951    2204    2720    28 -93 3 4 5
ATOM    820  OG1 THR  120 -3.773  32.238  44.284 1.000 20.49
ANISOU  820  OG1 THR  120 1807    2801    3179    59 -363  5 5 8
ATOM    821  CG2 THR  120 -1.919  32.803  42.933 1.000 22.46
ANISOU  821  CG2 THR  120 2438    3266    2830    475    118  7 0 5
ATOM    822  N   GLN  121 0.094   33.708  45.956 1.000 18.62
ANISOU  822  N   GLN  121 2180    1657    3237    123    -94  2 1 3
ATOM    823  CA  GLN  121 1.466   34.232  45.993 1.000 18.15
ANISOU  823  CA  GLN  121 2077    1698    3119    77 96 5 2 0
ATOM    824  C   GLN  121 2.412   33.284  46.718 1.000 17.04
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ANISOU  824  C   GLN  121 2022    1431     3019    192   234   2 2 3
ATOM    825  O   GLN  121 3.510   33.047   46.270  1.000 19.32
ANISOU  825  O   GLN  121 1894    1800     3645    93   246  129
ATOM    826  CB  GLN  121 1.490   35.579   46.756  1.000 22.90
ANISOU  826  CB  GLN  121 2520    1479     4702    327  -812 271
ATOM    827  CG  GLN  121 2.888   36.159   46.871  1.000 27.04
ANISOU  827  CG  GLN  121 2949    2062     5262   -346  -400 132
ATOM    828  CD  GLN  121 3.530   36.511   45.535  1.000 31.94
ANISOU  828  CD  GLN  121 3307    2733     6097    983  1031  9 9
ATOM    829  OE1 GLN  121 4.660   36.085   45.247  1.000 62.76
ANISOU  829  OE1 GLN  121 3009    9570     11267   1758 2366 2029
ATOM    830  NE2 GLN  121 2.859   37.306   44.716  1.000 55.89
ANISOU  830  NE2 GLN  121 6516    7728     6993    2815 1745 3249
ATOM    831  N   TYR  122 1.997   32.791   47.871  1.000 16.87
ANISOU  831  N   TYR  122 2389    1518     2501    71  -161  -54
ATOM    832  CA  TYR  122 2.795   31.881   48.683  1.000 17.97
ANISOU  832  CA  TYR  122 2564    1600     2566    176 -224  -56
ATOM    833  C   TYR  122 3.080   30.600   47.909  1.000 16.83
ANISOU  833  C   TYR  122 1870    1460     3065   -31   -57  -98
ATOM    834  O   TYR  122 4.224   30.129   47.823  1.000 17.67
ANISOU  834  O   TYR  122 1891    1952     2872    189 -220 126
ATOM    835  CB  TYR  122 2.018   31.522   49.960  1.000 18.01
ANISOU  835  CB  TYR  122 2526    1821     2495    2   -325  -55
ATOM    836  CG  TYR  122 2.753   30.619   50.898  1.000 17.89
ANISOU  836  CG  TYR  122 2332    1695     2769    255 -147  -51
ATOM    837  CD1 TYR  122 4.058   30.901   51.323  1.000 21.71
ANISOU  837  CD1 TYR  122 2883    2101     3267   -257 -913  3 4
ATOM    838  CD2 TYR  122 2.107   29.496   51.415  1.000 21.29
ANISOU  838  CD2 TYR  122 2428    2026     3634    128 -267  4 6 8
ATOM    839  CE1 TYR  122 4.680   30.037   52.212  1.000 21.27
ANISOU  839  CE1 TYR  122 2681    2045     3356    140 -725 -210
ATOM    840  CE2 TYR  122 2.746   28.637   52.290  1.000 24.50
ANISOU  840  CE2 TYR  122 3376    1876     4057   -292 -1163 506
ATOM    841  CZ  TYR  122 4.043   28.914   52.675  1.000 22.16
ANISOU  841  CZ  TYR  122 3161    1881     3379    95  -909  -128
ATOM    842  OH  TYR  122 4.699   28.079   53.566  1.000 23.72
ANISOU  842  OH  TYR  122 3471    2398     3142    52 -1005  -56
ATOM    843  N   PHE  123 2.074   30.023   47.253  1.000 16.21
ANISOU  843  N   PHE  123 1794    1571     2793    49   -66  -54
ATOM    844  CA  PHE  123 2.347   28.843   46.397  1.000 15.71
ANISOU  844  CA  PHE  123 1622    1800     2548    34  -142  -103
ATOM    845  C   PHE  123 3.378   29.188   45.337  1.000 15.96
ANISOU  845  C   PHE  123 1681    1304     3078    42  90 3
ATOM    846  O   PHE  123 4.276   28.375   45.037  1.000 15.47
ANISOU  846  O   PHE  123 1703    1437     2739    54  14  -24
ATOM    847  CB  PHE  123 1.036   28.309   45.779  1.000 15.07
ANISOU  847  CB  PHE  123 1460    1364     2904    209 -148 1
ATOM    848  CG  PHE  123 1.241   27.104   44.879  1.000 17.41
ANISOU  848  CG  PHE  123 2090    1620     2906   -39  -179 -238
ATOM    849  CD1 PHE  123 1.170   25.831   45.452  1.000 17.41
ANISOU  849  CD1 PHE  123 1680    1439     3494    72  -119  -255
ATOM    850  CD2 PHE  123 1.490   27.259   43.513  1.000 18.22
ANISOU  850  CD2 PHE  123 1723    2331     2870   -96  -216 -372
ATOM    851  CE1 PHE  123 1.419   24.740   44.636  1.000 19.15
ANISOU  851  CE1 PHE  123 2112    1766     3397    212 -540 -536
ATOM    852  CE2 PHE  123 1.722   26.144   42.717  1.000 19.63
ANISOU  852  CE2 PHE  123 1901    2476     3083   -134 -261 -632
ATOM    853  CZ  PHE  123 1.635   24.868   43.274  1.000 19.40
ANISOU  853  CZ  PHE  123 1525    2424     3421    385 -529 -490
ATOM    854  N   ASP  124 3.164   30.304   44.636  1.000 16.86
ANISOU  854  N   ASP  124 1947    1466     2992   -23  -110 124
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ATOM    855 CA  ASP   124 4.060    30.640 43.544 1.000 17.82
ANISOU  855 CA  ASP   124 2103     1747   2921   405   -24 3 14
ATOM    856 C   ASP   124 5.490    30.733 44.024 1.000 17.52
ANISOU  856 C   ASP   124 1999     1439   3219   181    94 8 9
ATOM    857 O   ASP   124 6.402    30.324 43.317 1.000 17.18
ANISOU  857 O   ASP   124 2086     1427   3015    34 181 1 77
ATOM    858 CB  AASP  124 3.639    31.997 42.942 0.534 21.77
ANISOU  858 CB  AASP  124 3475     2089   2706   642  -372 5 97
ATOM    859 CG  AASP  124 4.381    32.304 41.659 0.534 19.28
ANISOU  859 CG  AASP  124 2376     1982   2967   173  -553 4 95
ATOM    860 OD1 AASP  124 4.223    31.538 40.678 0.534 21.03
ANISOU  860 OD1 AASP  124 2189     2636   3164   -28    76 2 1
ATOM    861 OD2 AASP  124 5.068    33.348 41.639 0.534 24.96
ANISOU  861 OD2 AASP  124 3681     2052   3752  -296 -1067 8 89
ATOM    862 CB  BASP  124 3.632    31.975 42.908 0.466 19.67
ANISOU  862 CB  BASP  124 2559     1993   2923  1003   673 4 46
ATOM    863 CG  BASP  124 2.368    31.849 42.089 0.466 22.78
ANISOU  863 CG  BASP  124 3552     3217   1889   872   177 11 75
ATOM    864 OD1 BASP  124 2.021    30.781 41.545 0.466 27.78
ANISOU  864 OD1 BASP  124 2138     3932   4483   100   503 3 47
ATOM    865 OD2 BASP  124 1.703    32.893 41.902 0.466 29.73
ANISOU  865 OD2 BASP  124 3845     3804   3646  1239  -312 16 44
ATOM    866 N   ARG   125 5.669    31.416 45.153 1.000 16.65
ANISOU  866 N   ARG   125 1942     1350   3032   276   139 2 76
ATOM    867 CA  ARG   125 7.038    31.528 45.646 1.000 17.58
ANISOU  867 CA  ARG   125 1918     1819   2944    98 177 2 41
ATOM    868 C   ARG   125 7.662    30.188 45.992 1.000 17.38
ANISOU  868 C   ARG   125 1544     1777   3282   -42    40 2 73
ATOM    869 O   ARG   125 8.841    29.942 45.754 1.000 18.26
ANISOU  869 O   ARG   125 1639     1669   3631   -97    91 -2 33
ATOM    870 CB  ARG   125 7.062    32.468 46.851 1.000 20.45
ANISOU  870 CB  ARG   125 2219     2162   3387  -244   450 -2 74
ATOM    871 CG  ARG   125 6.860    33.916 46.344 1.000 28.23
ANISOU  871 CG  ARG   125 3178     2007   5542   147   666 -2 22
ATOM    872 CD  ARG   125 6.693    34.891 47.477 1.000 31.76
ANISOU  872 CD  ARG   125 3065     2279   6725  -628  1455 -9 93
ATOM    873 NE  ARG   125 6.496    36.221 46.932 1.000 40.81
ANISOU  873 NE  ARG   125 3332     2095  10080  -169  1790 -6 94
ATOM    874 CZ  ARG   125 5.970    37.229 47.628 1.000 43.42
ANISOU  874 CZ  ARG   125 4531     2891   9076   839  2072 -1 88
ATOM    875 NH1 ARG   125 5.551    37.025 48.866 1.000 38.62
ANISOU  875 NH1 ARG   125 3999     2858   7816  -858    61 -7 00
ATOM    876 NH2 ARG   125 5.858    33.382 47.006 1.000 42.11
ANISOU  876 NH2 ARG   125 5319     2652   8030   908  1627 -6 81
ATOM    877 N   GLN   126 6.884    29.282 46.557 1.000 15.28
ANISOU  877 N   GLN   126 1876     1527   2404   -70    13 -6 0
ATOM    878 CA  GLN   126 7.376    27.929 46.853 1.000 15.37
ANISOU  878 CA  GLN   126 1726     1625   2488   -54  -312 2 0
ATOM    879 C   GLN   126 7.649    27.150 45.578 1.000 14.21
ANISOU  879 C   GLN   126 1643     1268   2488   -75  -398 7 1
ATOM    880 O   GLN   126 8.682    26.462 45.496 1.000 15.36
ANISOU  880 O   GLN   126 1531     1554   2753   -37  -316 5 3
ATOM    881 CB  GLN   126 6.356    27.158 47.702 1.000 17.40
ANISOU  881 CB  GLN   126 2034     1313   3264   158   293 4 3
ATOM    882 CG  GLN   126 6.336    27.634 49.150 1.000 26.14
ANISOU  882 CG  GLN   126 4503     1690   3739   431  1908 -7 32
ATOM    883 CD  GLN   126 5.208    26.998 49.891 1.000 21.95
ANISOU  883 CD  GLN   126 2957     2670   2713     0  -123 10 2
ATOM    884 OE1 GLN   126 4.051    27.372 49.730 1.000 42.52
ANISOU  884 OE1 GLN   126 2994     5747   7416   -62 -1272 31 47
ATOM    885 NE2 GLN   126 5.524    26.003 50.691 1.000 28.32
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ANISOU 885    NE2 GLN   126 2867      3971    3922    -184  -780 1311
ATOM   886    N   TYR   127 6.797     27.287  44.574 1.000 14.52
ANISOU 886    N   TYR   127 1629      1438    2448    -41   -373 - 36
ATOM   887    CA  TYR   127 7.039     26.554  43.317 1.000 13.93
ANISOU 887    CA  TYR   127 1563      1455    2277    -136  -234 150
ATOM   888    C   TYR   127 8.289     27.091  42.624 1.000 14.54
ANISOU 888    C   TYR   127 1461      1318    2745    24    -195 19 0
ATOM   889    O   TYR   127 9.133     26.345  42.140 1.000 14.39
ANISOU 889    O   TYR   127 1611      1580    2277    34    -252 9
ATOM   890    CB  TYR   127 5.801     26.676  42.435 1.000 14.00
ANISOU 890    CB  TYR   127 1510      1549    2258    29    -180 - 70
ATOM   891    CG  TYR   127 5.752     25.795  41.202 1.000 12.33
ANISOU 891    CG  TYR   127 1315      1037    2334    -34   -187 4 5
ATOM   892    CD1 TYR   127 6.483     24.626  41.024 1.000 14.05
ANISOU 892    CD1 TYR   127 1810      1158    2371    7     -84 - 8
ATOM   893    CD2 TYR   127 4.837     26.086  40.206 1.000 15.71
ANISOU 893    CD2 TYF.  127 1936      1548    2484    55    -513 2 1
ATOM   894    CE1 TYR   127 6.382     23.829  39.899 1.000 13.10
ANISOU 894    CE1 TYR   127 1450      999     2529    -101  -227 - 62
ATOM   895    CE2 TYR   127 4.661     25.322  39.071 1.000 15.07
ANISOU 895    CE2 TYR   127 1928      1620    2177    158   -342 197
ATOM   896    CZ  TYR   127 5.440     24.179  38.934 1.000 13.71
ANISOU 896    CZ  TYR   127 1617      1348    2245    -146  -106 246
ATOM   897    OH  TYR   127 5.337     23.386  37.811 1.000 15.04
ANISOU 897    OH  TYR   127 1682      1755    2279    -87   -60  5 3
ATOM   898    N   THR   128 8.467     28.412  42.616 1.000 14.69
ANISOU 898    N   THR   128 1813      1324    2446    -154  -217 26 8
ATOM   899    CA  THR   128 9.673     28.984  42.011 1.000 14.67
ANISOU 899    CA  THR   128 1867      1469    2238    -98   -32  195
ATOM   900    C   THR   128 10.921    28.552  42.736 1.000 14.68
ANISOU 900    C   THR   128 1794      1318    2466    59    -123 - 285
ATOM   901    O   THR   128 11.900    28.166  42.062 1.000 15.45
ANISOU 901    O   THR   128 1715      1487    2667    -259  153  7 1
ATOM   902    CB  THR   128 9.572     30.544  42.069 1.000 16.02
ANISOU 902    CB  THR   128 2043      1348    2635    -79   59  479
ATOM   903    OG1 THR   128 8.519     30.849  41.162 1.000 19.14
ANISOU 903    OG1 THR   128 2226      2038    3008    195   -23  5 45
ATOM   904    CG2 THR   128 10.835    31.187  41.582 1.000 19.03
ANISOU 904    CG2 THR   128 2107      1329    3793    125   311  6 18
ATOM   905    N   ALA   129 10.933    28.564  44.085 1.000 14.21
ANISOU 905    N   ALA   129 1708      1266    2424    -137  -256 - 181
ATOM   906    CA  ALA   129 12.108    28.110  44.836 1.000 15.08
ANISOU 906    CA  ALA   129 1670      1435    2624    -118  -210 - 225
ATOM   907    C   ALA   129 12.389    26.643  44.562 1.000 14.37
ANISOU 907    C   ALA   129 1706      1299    2457    -159  -203 15 7
ATOM   908    O   ALA   129 13.552    26.238  44.445 1.000 14.10
ANISOU 908    O   ALA   129 1758      1464    2137    -5    -244 - 148
ATOM   909    CB  ALA   129 11.887    28.313  46.313 1.000 17.08
ANISOU 909    CB  ALA   129 2132      1851    2506    -183  -514 - 239
ATOM   910    N   SER   130 11.343    25.819  44.553 1.000 14.18
ANISOU 910    N   SER   130 1884      1237    2267    -224  -257 173
ATOM   911    CA  SER   130 11.487    24.375  44.351 1.000 15.44
ANISOU 911    CA  SER   130 1840      1219    2807    -115  -135 - 7
ATOM   912    C   SER   130 12.072    24.114  42.965 1.000 14.45
ANISOU 912    C   SER   130 1345      1481    2665    78    -796 - 209
ATOM   913    O   SER   130 13.037    23.329  42.807 1.000 14.43
ANISOU 913    O   SER   130 1327      1382    2773    -74   -246 172
ATOM   914    CB  SER   130 10.120    23.677  44.663 1.000 17.54
ANISOU 914    CB  SER   130 1555      1225    3884    -379  -647 12 6
ATOM   915    OG  SER   130 9.268     23.888  43.558 1.000 27.32
ANISOU 915    OG  SER   130 2321      3168    4893    11    -1207 865
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ATOM     916  N   ARG  131  11.555  24.772  41.909  1.000  14.47
ANISOU   916  N   ARG  131  1421   1448   2628    161   -384 -166
ATOM     917  CA  ARG  131  12.163  24.598  40.592  1.000  14.91
ANISOU   917  CA  ARG  131  1689   1452   2525    -4  -526  -341
ATOM     918  C   ARG  131  13.605  25.079  40.566  1.000  14.05
ANISOU   918  C   ARG  131  1772   1435   2132    -72  -381 -173
ATOM     919  O   ARG  131  14.448  24.438  39.912  1.000  15.14
ANISOU   919  O   ARG  131  1829   1658   2267   -109  -170 -230
ATOM     920  CB  ARG  131  11.349  25.316  39.514  1.000  15.77
ANISOU   920  CB  ARG  131  1720   1613   2660    -54  -493  -94
ATOM     921  CG  ARG  131  9.970   24.737  39.251  1.000  15.08
ANISOU   921  CG  ARG  131  1703   1695   2711    -13  -647 -141
ATOM     922  CD  ARG  131  9.326   25.390  38.017  1.000  26.56
ANISOU   922  CD  ARG  131  3589   2689   3813  -1037 -2156  745
ATOM     923  NE  ARG  131  9.327   26.831  37.918  1.000  25.91
ANISOU   923  NE  ARG  131  2856   2814   4174   -979 -1682 1413
ATOM     924  CZ  ARG  131  8.472   27.716  38.413  1.000  31.86
ANISOU   924  CZ  ARG  131  3546   2861   5697   -254 -1094 2201
ATOM     925  NH1 ARG  131  7.467   27.244  39.138  1.000  31.34
ANISOU   925  NH1 ARG  131  5127   3636   3144  -1474 -458 -115
ATOM     926  NH2 ARG  131  8.633   29.032  38.235  1.000  40.12
ANISOU   926  NH2 ARG  131  3500   2831   8912   -582 -1620 1802
ATOM     927  N   ALA  132  13.893  26.186  41.236  1.000  13.42
ANISOU   927  N   ALA  132  1683   1385   2033    -85  -652  -24
ATOM     928  CA  ALA  132  15.246  26.751  41.128  1.000  13.38
ANISOU   928  CA  ALA  132  1617   1443   2022    -16  -499  -79
ATOM     929  C   ALA  132  16.225  25.808  41.837  1.000  13.37
ANISOU   929  C   ALA  132  1398   1365   2316    -93  -253  154
ATOM     930  O   ALA  132  17.306  25.586  41.328  1.000  14.43
ANISOU   930  O   ALA  132  1459   1772   2251    -91  -240  106
ATOM     931  CB  ALA  132  15.275  28.084  41.859  1.000  16.52
ANISOU   931  CB  ALA  132  2019   1243   3014   -199  -366 -236
ATOM     932  N   VAL  133  15.893  25.248  42.996  1.000  13.62
ANISOU   932  N   VAL  133  1522   1515   2139    -63  -362   86
ATOM     933  CA  VAL  133  16.839  24.363  43.689  1.000  14.86
ANISOU   933  CA  VAL  133  1902   1566   2179    120  -491  -27
ATOM     934  C   VAL  133  16.923  23.073  42.890  1.000  15.04
ANISOU   934  C   VAL  133  1390   1633   2690    -9  -220  -218
ATOM     935  O   VAL  133  18.036  22.538  42.773  1.000  15.49
ANISOU   935  O   VAL  133  1442   1814   2630    63  -193   -99
ATOM     936  CB  VAL  133  16.545  24.170  45.187  1.000  14.61
ANISOU   936  CB  VAL  133  1528   1789   2234    -45  -391  210
ATOM     937  CG1 VAL  133  15.362  23.267  45.453  1.000  16.78
ANISOU   937  CG1 VAL  133  1544   2123   2708   -249  -437  -81
ATOM     938  CG2 VAL  133  17.766  23.650  45.950  1.000  16.51
ANISOU   938  CG2 VAL  133  1769   1942   2561    -61  -831   64
ATOM     939  N   ALA  134  15.840  22.583  42.270  1.000  13.73
ANISOU   939  N   ALA  134  1605   1451   2160    -75  -397  185
ATOM     940  CA  ALA  134  15.951  21.369  41.451  1.000  14.21
ANISOU   940  CA  ALA  134  1505   1796   2100    116  -570  -33
ATOM     941  C   ALA  134  16.838  21.618  40.246  1.000  15.07
ANISOU   941  C   ALA  134  1766   1511   2450    43  -292   17
ATOM     942  O   ALA  134  17.600  20.750  39.800  1.000  14.36
ANISOU   942  O   ALA  134  1555   1567   2333    -60  -286   52
ATOM     943  CB  ALA  134  14.535  20.925  41.032  1.000  16.97
ANISOU   943  CB  ALA  134  1472   1943   3031    12  -470  -299
ATOM     944  N   ARG  135  16.752  22.808  39.631  1.000  15.48
ANISOU   944  N   ARG  135  1848   1600   2433    14  -341   -2
ATOM     945  CA  ARG  135  17.618  23.153  38.508  1.000  16.07
ANISOU   945  CA  ARG  135  2139   1230   2735   -138  -189   35
ATOM     946  C   ARG  135  19.082  23.057  38.955  1.000  15.70
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ANISOU  946  C   ARG  135 2059      1370      2535   -134   27 121
ATOM    947  O   ARG  135 19.928    22.604    38.176 1.000 18.07
ANISOU  947  O   ARG  135 2317      2014      2534    108  256  276
ATOM    948  CB  ARG  135 17.277    24.586    38.096 1.000 21.96
ANISOU  948  CB  ARG  135 3936      1640      2767     -4 -1480 614
ATOM    949  CG  ARG  135 17.571    24.989    36.689 1.000 27.53
ANISOU  949  CG  ARG  135 5112      2482      2866    816  -610 595
ATOM    950  CD  ARG  135 16.930    26.332    36.393 1.000 23.27
ANISOU  950  CD  ARG  135 3548      2428      2865    148   61 1371
ATOM    951  NE  ARG  135 15.551    26.309    35.928 1.000 22.68
ANISOU  951  NE  ARG  135 3488      1575      3556   -116  167  297
ATOM    952  CZ  ARG  135 14.520    26.858    36.562 1.000 25.90
ANISOU  952  CZ  ARG  135 3801      2165      3874    921  -506 -179
ATOM    953  NH1 ARG  135 14.708    27.515    37.702 1.000 23.50
ANISOU  953  NH1 ARG  135 3582      2378      2969     94  137 532
ATOM    954  NH2 ARG  135 13.287    26.758    36.035 1.000 24.30
ANISOU  954  NH2 ARG  135 3520      2441      3272   -101   72 582
ATOM    955  N   GLU  136 19.403    23.533    40.149 1.000 15.76
ANISOU  955  N   GLU  136 1897      1696      2396   -178   17 318
ATOM    956  CA  GLU  136 20.752    23.431    40.694 1.000 15.16
ANISOU  956  CA  GLU  136 1687      1770      2302    -97  279  140
ATOM    957  C   GLU  136 21.186    22.001    40.978 1.000 16.74
ANISOU  957  C   GLU  136 1535      1704      3122   -148 -172 -72
ATOM    958  O   GLU  136 22.350    21.637    40.701 1.000 17.42
ANISOU  958  O   GLU  136 1710      1908      2999      7   30 9 2
ATOM    959  CB  GLU  136 20.957    24.284    41.962 1.000 16.64
ANISOU  959  CB  GLU  136 2048      1785      2487     53   11 -16
ATOM    960  CG  GLU  136 20.762    25.772    41.718 1.000 17.80
ANISOU  960  CG  GLU  136 2036      1714      3014   -286 -169 110
ATOM    961  CD  GLU  136 21.534    26.269    40.513 1.000 20.92
ANISOU  961  CD  GLU  136 2174      2273      3503   -343   70 469
ATOM    962  OE1 GLU  136 22.742    25.987    40.454 1.000 24.97
ANISOU  962  OE1 GLU  136 2116      2434      4938   -494  531  219
ATOM    963  OE2 GLU  136 21.022    27.037    39.672 1.000 24.77
ANISOU  963  OE2 GLU  136 2975      2618      3817   -708 -133 1029
ATOM    964  N   VAL  137 20.262    21.172    41.450 1.000 15.34
ANISOU  964  N   VAL  137 1681      1696      2453   -108 -287 113
ATOM    965  CA  VAL  137 20.568    19.750    41.647 1.000 15.92
ANISOU  965  CA  VAL  137 1755      1802      2493     83   -4 210
ATOM    966  C   VAL  137 20.926    19.086    40.326 1.000 15.86
ANISOU  966  C   VAL  137 1604      1869      2555    -38  -35 6 6
ATOM    967  O   VAL  137 21.905    18.308    40.174 1.000 16.70
ANISOU  967  O   VAL  137 1617      2118      2609     72 -151 -90
ATOM    968  CB  VAL  137 19.358    18.990    42.283 1.000 15.35
ANISOU  968  CB  VAL  137 1729      1663      2440      8  -29 5
ATOM    969  CG1 VAL  137 19.607    17.478    42.176 1.000 16.93
ANISOU  969  CG1 VAL  137 1521      1689      3223    160 -345 9 6
ATOM    970  CG2 VAL  137 19.144    19.420    43.724 1.000 15.43
ANISOU  970  CG2 VAL  137 1529      2090      2245    -53 -277 185
ATOM    971  N   LEU  138 20.149    19.407    39.284 1.000 15.52
ANISOU  971  N   LEU  138 1625      1735      2535   -105  -61 109
ATOM    972  CA  LEU  138 20.378    18.881    37.936 1.000 15.74
ANISOU  972  CA  LEU  138 1576      1862      2543    -71   15 5 1
ATOM    973  C   LEU  138 21.721    19.396    37.406 1.000 17.42
ANISOU  973  C   LEU  138 1588      2119      2912    -87  162 -45
ATOM    974  O   LEU  138 22.503    18.609    36.846 1.000 19.13
ANISOU  974  O   LEU  138 1878      2406      2985    186  317 6 2
ATOM    975  CB  LEU  138 19.211    19.248    36.996 1.000 14.70
ANISOU  975  CB  LEU  138 1592      1642      2349    -50  141 190
ATOM    976  CG  LEU  138 17.883    18.541    37.375 1.000 14.38
ANISOU  976  CG  LEU  138 1657      1409      2399    -44   -4 288
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ATOM     977  CD1 LEU  138 16.774   19.122   36.491 1.000 16.13
ANISOU   977  CD1 LEU  138 1743     1848     2539     128   -218 168
ATOM     978  CD2 LEU  138 17.975   17.027   37.156 1.000 17.48
ANISOU   978  CD2 LEU  138 2185     1435     3021    -107   -480 287
ATOM     979  N   ARG  139 21.963   20.708   37.548 1.000 17.44
ANISOU   979  N   ARG  139 1797     2157     2674    -319    238 192
ATOM     980  CA  ARG  139 23.189   21.319   36.996 1.000 19.06
ANISOU   980  CA  ARG  139 2043     2462     2735    -366    482 376
ATOM     981  C   ARG  139 24.419   20.734   37.685 1.000 19.72
ANISOU   981  C   ARG  139 1797     2600     3097    -518    482 376
ATOM     982  O   ARG  139 25.461   20.432   37.094 1.000 20.70
ANISOU   982  O   ARG  139 2046     2469     3350    -288    607 195
ATOM     983  CB  ARG  139 23.152   22.850   37.101 1.000 24.54
ANISOU   983  CB  ARG  139 2525     2403     4396    -402    951 690
ATOM     984  CG  ARG  139 23.886   23.665   36.073 1.000 36.05
ANISOU   984  CG  ARG  139 6517     2967     4212   -2176   1609 140
ATOM     985  CD  ARG  139 23.852   25.148   36.443 1.000 44.95
ANISOU   985  CD  ARG  139 7459     1902     7716    -242  -1324 1930
ATOM     986  NE  ARG  139 22.525   25.727   36.547 1.000 43.27
ANISOU   986  NE  ARG  139 6637     3846     5959    -828  -2173 -698
ATOM     987  CZ  ARG  139 21.821   26.330   35.605 1.000 41.34
ANISOU   987  CZ  ARG  139 5939     4102     5666     497    645 1140
ATOM     988  NH1 ARG  139 22.308   26.436   34.376 1.000 44.01
ANISOU   988  NH1 ARG  139 6564     4146     6011     550   1393 336
ATOM     989  NH2 ARG  139 20.614   26.837   35.833 1.000 45.75
ANISOU   989  NH2 ARG  139 6162     4618     6602     537   1938 2405
ATOM     990  N   ALA  140 24.357   20.566   39.009 1.000 18.77
ANISOU   990  N   ALA  140 1742     2387     3003    -255    145  69
ATOM     991  CA  ALA  140 25.532   20.169   39.773 1.000 19.53
ANISOU   991  CA  ALA  140 1583     2641     3197     -28     38 -668
ATOM     992  C   ALA  140 25.932   18.732   39.490 1.000 18.96
ANISOU   992  C   ALA  140 2018     2342     2843     -67     76 -103
ATOM     993  O   ALA  140 27.109   18.335   39.626 1.000 21.36
ANISOU   993  O   ALA  140 1900     2436     3778      -2    472 -80
ATOM     994  CB  ALA  140 25.273   20.345   41.275 1.000 19.74
ANISOU   994  CB  ALA  140 1824     2592     3084      35      0 -360
ATOM     995  N   THR  141 24.958   17.943   39.062 1.000 20.32
ANISOU   995  N   THR  141 2014     2209     3498    -115    305 -138
ATOM     996  CA  THR  141 25.151   16.530   38.717 1.000 17.15
ANISOU   996  CA  THR  141 1870     2039     2609      61     51 218
ATOM     997  C   THR  141 25.269   16.278   37.208 1.000 17.44
ANISOU   997  C   THR  141 1492     2443     2693      21    278 199
ATOM     998  O   THR  141 25.343   15.106   36.792 1.000 19.24
ANISOU   998  O   THR  141 1871     2623     2814      63    579 -63
ATOM     999  CB  THR  141 24.048   15.629   39.290 1.000 16.79
ANISOU   999  CB  THR  141 1708     2261     2410      83    164  31
ATOM    1000  OG1 THR  141 22.788   16.012   38.710 1.000 17.18
ANISOU  1000  OG1 THR  141 1894     2235     2399    -101    -53 518
ATOM    1001  CG2 THR  141 23.982   15.734   40.807 1.000 17.83
ANISOU  1001  CG2 THR  141 1521     2878     2377     164    -43  20
ATOM    1002  N   GLY  142 25.361   17.301   36.381 1.000 19.69
ANISOU  1002  N   GLY  142 2091     2789     2603    -708    302 297
ATOM    1003  CA  GLY  142 25.517   17.123   34.923 1.000 19.08
ANISOU  1003  CA  GLY  142 1878     2819     2551     128   -163 255
ATOM    1004  C   GLY  142 24.284   16.441   34.313 1.000 18.75
ANISOU  1004  C   GLY  142 1972     2410     2744       0    252 -117
ATOM    1005  O   GLY  142 24.443   15.755   33.315 1.000 22.41
ANISOU  1005  O   GLY  142 2432     2681     3403    -161    571 -680
ATOM    1006  N   THR  143 23.093   16.650   34.854 1.000 17.28
ANISOU  1006  N   THR  143 1895     2002     2667      67    300 244
ATOM    1007  CA  THR  143 21.909   15.932   34.393 1.000 16.88
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ANISOU 1007 CA   THR  143 1953      2006     2456   164   332    6  6
ATOM   1008 C    THR  143 20.998 16.660 33.432 1.000 17.02
ANISOU 1008 C    THR  143 2149      1795     2521   82 196 117
ATOM   1009 O    THR  143 20.457 17.713 33.764 1.000 20.30
ANISOU 1009 O    THR  143 2795      1815     3103  344    12  - 2 8
ATOM   1010 CB   THR  143 21.085 15.490 35.623 1.000 16.40
ANISOU 1010 CB   THR  143 1755      2329     2148  -37   95  - 4 4
ATOM   1011 OG1  THR  143 21.922 14.692 36.479 1.000 17.82
ANISOU 1011 OG1  THR  143 2009      2075     2688 -109   39 337
ATOM   1012 CG2  THR  143 19.887 14.621 35.270 1.000 19.51
ANISOU 1012 CG2  THR  143 1957      2290     3167 -192  -94   1 0 0
ATOM   1013 N    GLU  144 20.742 16.070 32.248 1.000 18.79
ANISOU 1013 N    GLU  144 2138      2203     2800   47 12 -121
ATOM   1014 CA   GLU  144 19.729 16.573 31.334 1.000 20.13
ANISOU 1014 CA   GLU  144 2202      2696     2750 -292  -41   3 1 6
ATOM   1015 C    GLU  144 18.637 15.506 31.254 1.000 19.18
ANISOU 1015 C    GLU  144 2255      2614     2418 -292  230  - 1 3 1
ATOM   1016 O    GLU  144 18.827 14.433 30.665 1.000 21.46
ANISOU 1016 O    GLU  144 2268      2442     3446   19 649 - 8 8
ATOM   1017 CB   AGLU 144 20.250 17.061 30.006 0.753 29.50
ANISOU 1017 CB   AGLU 144 3376      4266     3566 -855  206  15 0 1
ATOM   1018 CG   AGLU 144 20.195 18.567 29.741 0.753 36.54
ANISOU 1018 CG   AGLU 144 6059      3913     3913 -1728 1769 795
ATOM   1019 CD   AGLU 144 21.242 19.411 30.426 0.753 33.13
ANISOU 1019 CD   AGLU 144 4189      3432     4966  104  744   8 8 4
ATOM   1020 OE1  AGLU 144 21.079 19.690 31.641 0.753 51.91
ANISOU 1020 OE1  AGLU 144 3684     11101     4940 -868 -202 -5 9 0
ATOM   1021 OE2  AGLU 144 -22.207 19.910 29.807 0.753 50.79
ANISOU 1021 OE2  AGLU 144 7949      3695     7653 -3071 3099 -1249
ATOM   1022 CB   BGLU 144 20.372 16.724 29.951 0.247 18.36
ANISOU 1022 CB   BGLU 144 868 3091      3016   334    16 262
ATOM   1023 CG   BGLU 144 21.214 17.988 29.779 0.247 23.54
ANISOU 1023 CG   BGLU 144 1301      3586     4056  -38  595   5 5 8
ATOM   1024 CD   BGLU 144 21.150 18.468 28.336 0.247 33.24
ANISOU 1024 CD   BGLU 144 3589      3975     5064  438   -20   2 0 3 1
ATOM   1025 OE1  BGLU 144 20.417 17.818 27.557 0.247 28.68
ANISOU 1025 OE1  BGLU 144 3222      4813     2861  389  1729 1280
ATOM   1026 OE2  BGLU 144 21.814 19.464 27.990 0.247 35.35
ANISOU 1026 OE2  BGLU 144 3176      5148     5108   35 1752  1516
ATOM   1027 N    PRO  145 17.508 15.724 31.911 1.000 17.11
ANISOU 1027 N    PRO  145 2132      1825     2543   68 62 158
ATOM   1028 CA   PRO  145 16.396 14.781 31.846 1.000 17.41
ANISOU 1028 CA   PRO  145 2290      1942     2384  -73  400   1 2
ATOM   1029 C    PRO  145 15.966 14.545 30.406 1.000 17.94
ANISOU 1029 C    PRO  145 2386      1955     2475 -116  292  - 1 0 4
ATOM   1030 O    PRO  145 16.068 15.439 29.557 1.000 18.26
ANISOU 1030 O    PRO  145 2271      2196     2472 -272  170    4 5
ATOM   1031 CB   PRO  145 15.250 15.493 32.594 1.000 17.07
ANISOU 1031 CB   PRO  145 2181      1771     2534   35 133 -143
ATOM   1032 CG   PRO  145 15.950 16.504 33.464 1.000 17.11
ANISOU 1032 CG   PRO  145 2341      1841     2319   23 -49  - 2 4
ATOM   1033 CD   PRO  145 17.131 16.977 32.649 1.000 17.54
ANISOU 1033 CD   PRO  145 2178      1601     2884  178   -88   3 0 3
ATOM   1034 N    ASP  146 15.490 13.346 30.104 1.000 18.15
ANISOU 1034 N    ASP  146 2140      1965     2790  -60  321  - 1 5 2
ATOM   1035 CA   ASP  146 14.909 13.121 28.775 1.000 18.43
ANISOU 1035 CA   ASP  146 2487      1664     2853 -329  310  - 1 5 6
ATOM   1036 C    ASP  146 13.809 14.154 28.566 1.000 18.07
ANISOU 1036 C    ASP  146 2824      1979     2064  -31  208  - 3 0 9
ATOM   1037 O    ASP  146 12.959 14.333 29.422 1.000 18.29
ANISOU 1037 O    ASP  146 2491      2173     2287 -168  203  - 2 3 0
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ATOM    1038 CB  ASP  146 14.221  11.735  28.717 1.000 23.50
ANISOU  1038 CB  ASP  146 3489    1671    3769   -653  908  -665
ATOM    1039 CG  ASP  146 13.636  11.508  27.334 1.000 34.15
ANISOU  1039 CG  ASP  146 4070    4205    4700   -1004 361  -2386
ATOM    1040 OD1 ASP  146 12.393  11.521  27.138 1.000 44.73
ANISOU  1040 OD1 ASP  146 3971    9175    3849   -2156 683  378
ATOM    1041 OD2 ASP  146 14.421  11.229  26.397 1.000 44.78
ANISOU  1041 OD2 ASP  146 4342    8626    4046   -813  289  -2326
ATOM    1042 N   GLY  147 13.901  14.854  27.450 1.000 19.28
ANISOU  1042 N   GLY  147 2622    2331    2374   -635  -72  113
ATOM    1043 CA  GLY  147 12.916  15.878  27.171 1.000 18.58
ANISOU  1043 CA  GLY  147 2463    2607    1991   -550  -234 -36
ATOM    1044 C   GLY  147 13.355  17.262  27.590 1.000 18.25
ANISOU  1044 C   GLY  147 2511    2432    1993   -335  -138 64
ATOM    1045 O   GLY  147 12.586  18.183  27.289 1.000 20.74
ANISOU  1045 O   GLY  147 2469    2739    2673   -182  -144 205
ATOM    1046 N   GLY  148 14.494  17.357  28.286 1.000 17.38
ANISOU  1046 N   GLY  148 2237    2174    2191   -462  -42  -90
ATOM    1047 CA  GLY  148 15.027  18.658  28.672 1.000 16.72
ANISOU  1047 CA  GLY  148 2308    1789    2255   39    -82  -77
ATOM    1048 C   GLY  148 14.653  19.076  30.085 1.000 13.94
ANISOU  1048 C   GLY  148 1517    1645    2135   77    -201 117
ATOM    1049 O   GLY  148 13.637  18.634  30.694 1.000 16.29
ANISOU  1049 O   GLY  148 1839    1863    2487   -151  -77  285
ATOM    1050 N   VAL  149 15.431  20.003  30.641 1.000 14.93
ANISOU  1050 N   VAL  149 1624    1780    2269   1     -193 -14
ATOM    1051 CA  VAL  149 15.275  20.509  32.017 1.000 14.16
ANISOU  1051 CA  VAL  149 1647    1511    2222   92    -195 86
ATOM    1052 C   VAL  149 13.958  21.218  32.235 1.000 14.37
ANISOU  1052 C   VAL  149 1735    1044    2682   -39   83   188
ATOM    1053 O   VAL  149 13.203  20.970  33.163 1.000 14.63
ANISOU  1053 O   VAL  149 1653    1517    2390   -160  -40  107
ATOM    1054 CB  VAL  149 16.439  21.410  32.417 1.000 14.02
ANISOU  1054 CB  VAL  149 1745    1530    2052   -112  -57  270
ATOM    1055 CG1 VAL  149 16.228  22.101  33.752 1.000 16.48
ANISOU  1055 CG1 VAL  149 2360    1709    2193   -153  -305 87
ATOM    1056 CG2 VAL  149 17.733  20.614  32.482 1.000 17.85
ANISOU  1056 CG2 VAL  149 1618    1937    3226   -59   -52  441
ATOM    1057 N   GLU  150 13.634  22.199  31.371 1.000 15.26
ANISOU  1057 N   GLU  150 1759    1328    2711   186   36   267
ATOM    1058 CA  GLU  150 12.471  23.028  31.687 1.000 14.91
ANISOU  1058 CA  GLU  150 1591    1434    2640   93    13   415
ATOM    1059 C   GLU  150 11.182  22.237  31.553 1.000 16.66
ANISOU  1059 C   GLU  150 1680    1980    2670   -197  113  199
ATOM    1060 O   GLU  150 10.259  22.408  32.379 1.000 15.89
ANISOU  1060 O   GLU  150 1697    1761    2578   29    79   580
ATOM    1061 CB  GLU  150 12.531  24.305  30.874 1.000 17.07
ANISOU  1061 CB  GLU  150 1925    1337    3223   254   189  513
ATOM    1062 CG  GLU  150 13.761  25.167  31.220 1.000 19.00
ANISOU  1062 CG  GLU  150 2483    1212    3523   -65   -95  465
ATOM    1063 CD  GLU  150 13.810  25.624  32.658 1.000 20.32
ANISOU  1063 CD  GLU  150 2444    1746    3532   -130  -24  454
ATOM    1064 OE1 GLU  150 12.781  25.749  33.377 1.000 20.88
ANISOU  1064 OE1 GLU  150 2558    1728    3648   29    58   396
ATOM    1065 OE2 GLU  150 14.913  25.946  33.161 1.000 21.77
ANISOU  1065 OE2 GLU  150 2549    2030    3693   -165  -202 273
ATOM    1066 N   ALA  151 11.050  21.288  30.603 1.000 14.98
ANISOU  1066 N   ALA  151 1649    1710    2334   37    -307 551
ATOM    1067 CA  ALA  151 9.834   20.475  30.543 1.000 15.79
ANISOU  1067 CA  ALA  151 1820    2045    2136   -173  -198 408
ATOM    1068 C   ALA  151 9.748   19.531  31.724 1.000 15.38
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ANISOU 1068 C    ALA  151 1674     1953     2216     165    181   4 4 2
ATOM   1069 O    ALA  151 8.642    19.186   32.184 1.000 16.51
ANISOU 1069 O    ALA  151 1778     1852     2643    -152    110   3 3 0
ATOM   1070 CB   ALA  151 9.823    19.663   29.236 1.000 18.05
ANISOU 1070 CB   ALA  151 1910     2811     2139    -275   -316 1 6 6
ATOM   1071 N    PHE  152 10.893   19.135   32.306 1.000 14.25
ANISOU 1071 N    PHE  152 1858     1132     2423      10   -107   2 6 3
ATOM   1072 CA   PHE  152 10.893   18.285   33.493 1.000 13.42
ANISOU 1072 CA   PHE  152 1457     1291     2353    -102    -34   3 0 4
ATOM   1073 C    PHE  152 10.406   19.056   34.695 1.000 13.93
ANISOU 1073 C    PHE  152 1481     1400     2412     -43   -165 1 9 6
ATOM   1074 O    PHE  152 9.679    18.495   35.558 1.000 14.50
ANISOU 1074 O    PHE  152 1590     1482     2438     -85     25   2 6
ATOM   1075 CB   PHE  152 12.309   17.744   33.728 1.000 13.95
ANISOU 1075 CB   PHE  152 1504     1547     2248     -29    111   4 6 3
ATOM   1076 CG   PHE  152 12.475   16.966   35.011 1.000 14.04
ANISOU 1076 CG   PHE  152 1747     1386     2200      88    -58 2 4 7
ATOM   1077 CD1  PHE  152 12.032   15.653   35.076 1.000 13.90
ANISOU 1077 CD1  PHE  152 1906     1306     2069     165    -36   2 8 1
ATOM   1078 CD2  PHE  152 13.094   17.499   36.127 1.000 15.67
ANISOU 1078 CD2  PHE  152 1927     1770     2259    -155   -115 2 3 3
ATOM   1079 CE1  PHE  152 12.213   14.949   36.263 1.000 14.06
ANISOU 1079 CE1  PHE  152 1669     1507     2165     182   -282 3 4 7
ATOM   1080 CE2  PHE  152 13.323   16.799   37.276 1.000 14.83
ANISOU 1080 CE2  PHE  152 1724     1671     2240      35   -112   1 6 5
ATOM   1081 CZ   PHE  152 12.861   15.522   37.361 1.000 14.86
ANISOU 1081 CZ   PHE  152 1994     1734     1916    -162     99 1 1 3
ATOM   1082 N    LEU  153 10.789   20.324   34.789 1.000 15.25
ANISOU 1082 N    LEU  153 1742     1355     2696      58    110 1 5 4
ATOM   1083 CA   LEU  153 10.454   21.151   35.939 1.000 14.65
ANISOU 1083 CA   LEU  153 1783     1429     2354     -66     16 2 0 3
ATOM   1084 C    LEU  153 9.082    21.791   35.877 1.000 14.47
ANISOU 1084 C    LEU  153 1732     1402     2362     -80     76 1 1
ATOM   1085 O    LEU  153 8.581    22.216   36.953 1.000 15.82
ANISOU 1085 O    LEU  153 1940     1454     2616    -313    312   - 1 5 7
ATOM   1086 CB   LEU  153 11.537   22.224   36.165 1.000 16.53
ANISOU 1086 CB   LEU  153 1626     1451     3205     -23    269   - 8 3
ATOM   1087 CG   LEU  153 12.914   21.685   36.514 1.000 15.90
ANISOU 1087 CG   LEU  153 1893     2013     2135     -33   -186 - 3 6
ATOM   1088 CD1  LEU  153 13.922   22.829   36.614 1.000 18.41
ANISOU 1088 CD1  LEU  153 1732     2473     2791    -156     80 - 8 7 6
ATOM   1089 CD2  LEU  153 12.863   20.883   37.794 1.000 21.76
ANISOU 1089 CD2  LEU  153 3083     3182     2005     365    261 1 9 3
ATOM   1090 N    ASP  154 8.473    21.866   34.708 1.000 14.41
ANISOU 1090 N    ASP  154 1768     1181     2525     -25     -8 2 9 3
ATOM   1091 CA   ASP  154 7.092    22.373   34.553 1.000 15.90
ANISOU 1091 CA   ASP  154 1665     1615     2760    -195     27 7 6 9
ATOM   1092 C    ASP  154 6.216    21.161   34.814 1.000 14.66
ANISOU 1092 C    ASP  154 1859     1304     2409     -92    143   5 1 5
ATOM   1093 O    ASP  154 5.995    20.368   33.889 1.000 17.30
ANISOU 1093 O    ASP  154 2561     1455     2557     -29    314   2 3 4
ATOM   1094 CB   ASP  154 6.923    22.909   33.125 1.000 18.59
ANISOU 1094 CB   ASP  154 1905     2077     3081     124    269   1 3 1 7
ATOM   1095 CG   ASP  154 5.461    23.157   32.768 1.000 19.87
ANISOU 1095 CG   ASP  154 2029     2531     2990     226    129 1 4 3 6
ATOM   1096 OD1  ASP  154 4.561    23.253   33.639 1.000 19.68
ANISOU 1096 OD1  ASP  154 1949     2209     3318      92 221 4 9 6
ATOM   1097 OD2  ASP  154 5.207    23.189   31.554 1.000 23.73
ANISOU 1097 OD2  ASP  154 2512     3475     3029     246   -137 6 5 3
ATOM   1098 N    CYS  155 5.831    20.904   36.070 1.000 14.25
ANISOU 1098 N    CYS  155 1708     1365     2342    -101    -62   5 4 6
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ATOM    1099 CA  CYS   155 5.418   19.569 36.468 1.000 13.45
ANISOU  1099 CA  CYS   155 1608    1346   2158   -191  4   458
ATOM    1100 C   CYS   155 4.157   19.574 37.302 1.000 12.49
ANISOU  1100 C   CYS   155 1644    1331   1772   -200 -148 6 2
ATOM    1101 O   CYS   155 3.224   20.303 36.941 1.000 14.55
ANISOU  1101 O   CYS   155 1633    1492   2402   -122 -111 4 42
ATOM    1102 CB  CYS   155 6.664   18.872 37.098 1.000 14.37
ANISOU  1102 CB  CYS   155 1907    1366   2186    122 -137 2 11
ATOM    1103 SG  CYS   155 7.265   19.595 38.641 1.000 14.99
ANISOU  1103 SG  CYS   155 1561    1821   2315    -74  -98  1 82
ATOM    1104 N   GLU   156 4.060   18.706 38.316 1.000 12.89
ANISOU  1104 N   GLU   156 1575    1379   1945   -130  29 19 4
ATOM    1105 CA  GLU   156 2.788   18.447 39.029 1.000 12.98
ANISOU  1105 CA  GLU   156 1508    1311   2114   -210  21 14 0
ATOM    1106 C   GLU   156 2.987   18.676 40.510 1.000 12.34
ANISOU  1106 C   GLU   156 1414    1198   2078    102  24 20 4
ATOM    1107 O   GLU   156 2.828   17.757 41.289 1.000 14.89
ANISOU  1107 O   GLU   156 1875    1425   2359    -15 -54  4 42
ATOM    1108 CB  GLU   156 2.278   17.047 38.678 1.000 14.48
ANISOU  1108 CB  GLU   156 1968    1323   2213   -279 120  8 7
ATOM    1109 CG  GLU   156 1.855   17.038 37.227 1.000 14.86
ANISOU  1109 CG  GLU   156 1894    1526   2227   -120  95 -152
ATOM    1110 CD  GLU   156 0.523   17.687 36.932 1.000 17.10
ANISOU  1110 CD  GLU   156 2091    1976   2431     44 -4 14 4
ATOM    1111 OE1 GLU   156 -0.204  17.967 37.886 1.000 17.98
ANISOU  1111 OE1 GLU   156 1811    2155   2866    -35  10 -355
ATOM    1112 OE2 GLU   156 0.214   17.990 35.759 1.000 20.99
ANISOU  1112 OE2 GLU   156 2854    2419   2704   -386 -516 5 62
ATOM    1113 N   PRO   157 3.292   19.893 40.958 1.000 12.09
ANISOU  1113 N   PRO   157 1314    1347   1934     12 -48 2 49
ATOM    1114 CA  PRO   157 3.576   20.121 42.391 1.000 13.28
ANISOU  1114 CA  PRO   157 1425    1696   1924    -68 117  14 7
ATOM    1115 C   PRO   157 2.330   19.996 43.248 1.000 12.87
ANISOU  1115 C   PRO   157 1236    1737   1916   -214 -47  12 4
ATOM    1116 O   PRO   157 1.192   20.190 42.744 1.000 13.73
ANISOU  1116 O   PRO   157 1286    1717   2214   -190 -17  14 3
ATOM    1117 CB  PRO   157 4.061   21.580 42.407 1.000 13.94
ANISOU  1117 CB  PRO   157 1518    1729   2047   -289 -166 2 47
ATOM    1118 CG  PRO   157 3.363   22.184 41.226 1.000 13.06
ANISOU  1118 CG  PRO   157 1558    1518   1887    -32 -158 - 88
ATOM    1119 CD  PRO   157 3.494   21.128 40.167 1.000 12.03
ANISOU  1119 CD  PRO   157 1521    1081   1968     -2 -7 12 1
ATOM    1120 N   LEU   158 2.542   19.738 44.526 1.000 13.02
ANISOU  1120 N   LEU   158 1554    1493   1899   -124 148  7 3
ATOM    1121 CA  LEU   158 1.438   19.699 45.496 1.000 12.72
ANISOU  1121 CA  LEU   158 1465    1552   1815   -126 -14  3 6
ATOM    1122 C   LEU   158 1.927   20.389 46.772 1.000 12.90
ANISOU  1122 C   LEU   158 1230    1715   1957    -27 -29  - 80
ATOM    1123 O   LEU   158 2.975   19.977 47.289 1.000 14.06
ANISOU  1123 O   LEU   158 1374    1666   2304     59 -257  - 236
ATOM    1124 CB  LEU   158 1.046   18.244 45.815 1.000 13.58
ANISOU  1124 CB  LEU   158 1673    1590   1896   -213  57 17 1
ATOM    1125 CG  LEU   158 0.044   18.030 46.945 1.000 14.84
ANISOU  1125 CG  LEU   158 1471    1774   2396    -16 262  2 42
ATOM    1126 CD1 LEU   158 -1.333  18.635 46.671 1.000 16.96
ANISOU  1126 CD1 LEU   158 1485    2196   2764      5 -148  - 401
ATOM    1127 CD2 LEU   158 -0.142  16.539 47.161 1.000 14.98
ANISOU  1127 CD2 LEU   158 1976    1820   1897   -390 171  7 9
ATOM    1128 N   LEU   159 1.139   21.306 47.283 1.000 13.44
ANISOU  1128 N   LEU   159 1509    1434   2165     43 -87 -119
ATOM    1129 CA  LEU   159 1.443   21.963 48.571 1.000 13.39
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ANISOU 1129 CA  LEU  159 1438      1555      2095     -36    -80  - 9 1
ATOM   1130 C   LEU  159 0.419    21.494    49.602 1.000 14.49
ANISOU 1130 C   LEU  159 1336      2034      2135    -152   -20S - 3 8
ATOM   1131 O   LEU  159 -0.790   21.596    49.419 1.000 15.09
ANISOU 1131 O   LEU  159 1414      1999      2319     90   -131   9 0
ATOM   1132 CB  LEU  159 1.390    23.466    48.394 1.000 15.28
ANISOU 1132 CB  LEU  159 1720      1447      2639     55   -325  - 1 97
ATOM   1133 CG  LEU  159 1.484    24.320    49.669 1.000 17.11
ANISOU 1133 CG  LEU  159 2146      1689      2665    363   -332 - 3 43
ATOM   1134 CD1 LEU  159 2.775    24.114    50.453 1.000 18.70
ANISOU 1134 CD1 LEU  159 2276      1759      3070    379   -687 - 5 40
ATOM   1135 CD2 LEU  159 1.312    25.801    49.291 1.000 21.00
ANISOU 1135 CD2 LEU  159 2918      1535      3526    439   -692 - 3 82
ATOM   1136 N   ARG  160 0.916    21.107    50.774 1.000 14.37
ANISOU 1136 N   ARG  160 1688      1709      2063    -101   -186 4 7
ATOM   1137 CA  ARG  160 0.055    20.747    51.901 1.000 15.61
ANISOU 1137 CA  ARG  160 1726      1990      2217    -64     90 - 1 18
ATOM   1138 C   ARG  160 0.480    21.501    53.155 1.000 15.40
ANISOU 1138 C   ARG  160 1557      2158      2135    -34    -46  - 3 8
ATOM   1139 O   ARG  160 1.639    21.401    53.576 1.000 16.32
ANISOU 1139 O   ARG  160 1528      2508      2164     63    41 - 1 04
ATOM   1140 CB  ARG  160 0.048    19.263    52.227 1.000 16.13
ANISOU 1140 CB  ARG  160 2134      2084      1912    -127   -30   1 29
ATOM   1141 CG  ARG  160 -0.594   18.410    51.155 1.000 17.17
ANISOU 1141 CG  ARG  160 1963      1934      2628    -140   -212 - 6 0
ATOM   1142 CD  ARG  160 -0.672   16.959    51.627 1.000 18.16
ANISOU 1142 CD  ARG  160 2767      1965      2166    125    -330 - 3 5
ATOM   1143 NE  ARG  160- -1.382  16.102    50.682 1.000 18.11
ANISOU 1143 NE  ARG  160 2408      1775      2699    -56    -308 2 0
ATOM   1144 CZ  ARG  160 -1.221   14.789    50.581 1.000 16.76
ANISOU 1144 CZ  ARG  160 2191      1748      2428    -97     55 1 74
ATOM   1145 NH1 ARG  160 -0.326   14.192    51.374 1.000 20.55
ANISOU 1145 NH1 ARG  160 2306      2012      3491    -26    -457 3 05
ATOM   1146 NH2 ARG  160 -1.908   14.095    49.689 1.000 19.23
ANISOU 1146 NH2 ARG  160 2502      2031      2774    181    -147 - 3 38
ATOM   1147 N   PHE  161 -0.469   22.257    53.755 1.000 15.36
ANISOU 1147 N   PHE  161 1604      2120      2111    -37    -63  - 1 28
ATOM   1148 CA  PHE  161 -0.209   22.975    54.999 1.000 16.25
ANISOU 1148 CA  PHE  161 2173      1774      2227    -71    -187 - 8 9
ATOM   1149 C   PHE  161 -1.030   22.236    56.069 1.000 16.98
ANISOU 1149 C   PHE  161 1980      2432      2041    -217   -161 - 1 62
ATOM   1150 O   PHE  161 -2.248   22.113    55.948 1.000 20.38
ANISOU 1150 O   PHE  161 1981      3291      2473    -190   -191 - 7 2
ATOM   1151 CB  PHE  161 -0.683   24.431    54.862 1.000 19.76
ANISOU 1151 CB  PHE  161 2065      1903      3540    167    355  - 1 98
ATOM   1152 CG  PHE  161 -0.379   25.259    56.109 1.000 23.61
ANISOU 1152 CG  PHE  161 3026      1905      4041    836    -59  - 5 91
ATOM   1153 CD1 PHE  161 -1.194   25.304    57.228 1.000 28.25
ANISOU 1153 CD1 PHE  161 3992      2474      4268    1077   369  - 1 253
ATOM   1154 CD2 PHE  161 0.807    25.978    56.141 1.000 26.62
ANISOU 1154 CD2 PHE  161 4015      2483      3616    -130   -927 - 1 06
ATOM   1155 CE1 PHE  161 -0.850   25.992    58.383 1.000 35.29
ANISOU 1155 CE1 PHE  161 6873      2097      4437    1538   -135 - 1 399
ATOM   1156 CE2 PHE  161 1.153    26.723    57.258 1.000 33.63
ANISOU 1156 CE2 PHE  161 4643      3240      4894    1263   -2085 - 1 268
ATOM   1157 CZ  PHE  161 0.320    26.726    53.363 1.000 36.44
ANISOU 1157 CZ  PHE  161 6071      4282      3493    1455   -2477 - 1 044
ATOM   1158 N   ARG  162 -0.358   21.767    57.130 1.000 17.59
ANISOU 1158 N   ARG  162 2095      2487      2103    -118   -135 - 6 9
ATOM   1159 CA  ARG  162 -1.072   21.078    58.199 1.000 18.27
ANISOU 1159 CA  ARG  162 2769      2414      1758     6    178 - 3 78
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ATOM    1160 C    ARG  162 -0.880  21.758  59.553 1.000 20.16
ANISOU  1160 C    ARG  162 2110    3341    2210    -36   41  -960
ATOM    1161 O    ARG  162 0.217   22.160  59.893 1.000 19.61
ANISOU  1161 O    ARG  162 2257    2993    2201    -194  -73  -359
ATOM    1162 CB   ARG  162 -0.580  19.640  58.356 1.000 20.81
ANISOU  1162 CB   ARG  162 2958    2275    2675    -129  6    -169
ATOM    1163 CG   ARG  162 -0.843  18.724  57.166 1.000 19.90
ANISOU  1163 CG   ARG  162 3044    2073    2443    -112  254  -38
ATOM    1164 CD   ARG  162 -0.182  17.383  57.393 1.000 28.02
ANISOU  1164 CD   ARG  162 5599    2038    3010    381   -14  114
ATOM    1165 NE   ARG  162 -0.369  16.420  56.326 1.000 27.74
ANISOU  1165 NE   ARG  162 4151    2294    4097    555   -687 -434
ATOM    1166 CZ   ARG  162 -1.278  15.445  56.370 1.000 31.11
ANISOU  1166 CZ   ARG  162 2560    3729    5531    470   -350 -1152
ATOM    1167 NH1  ARG  162 -2.092  15.324  57.403 1.000 42.97
ANISOU  1167 NH1  ARG  162 3475    5906    6946    -579  1019 -2492
ATOM    1168 NH2  ARG  162 -1.329  14.603  55.353 1.000 29.64
ANISOU  1168 NH2  ARG  162 3066    2738    5458    120   -143 -708
ATOM    1169 N    TYR  163 -1.956  21.780  60.311 1.000 19.52
ANISOU  1169 N    TYR  163 2394    2901    2120    147   263  -763
ATOM    1170 CA   TYR  163 -1.943  22.102  61.732 1.000 22.74
ANISOU  1170 CA   TYR  163 3312    3107    2219    369   302  -878
ATOM    1171 C    TYR  163 -2.037  20.800  62.536 1.000 24.20
ANISOU  1171 C    TYR  163 2802    3901    2492    -222  253  -189
ATOM    1172 O    TYR  163 -2.992  20.049  62.274 1.000 28.02
ANISOU  1172 O    TYR  163 2305    4409    3934    -202  -126 399
ATOM    1173 CB   TYR  163 -3.198  22.912  62.114 1.000 28.98
ANISOU  1173 CB   TYR  163 3861    3231    3920    267   1196 -1783
ATOM    1174 CG   TYR  163 -3.342  22.997  63.623 1.000 25.58
ANISOU  1174 CG   TYR  163 2572    3382    3767    543   749  -1204
ATOM    1175 CD1  TYR  163 -2.458  23.826  64.319 1.000 37.32
ANISOU  1175 CD1  TYR  163 3654    6112    4413    -759  884  -2373
ATOM    1176 CD2  TYR  163 -4.315  22.333  64.345 1.000 29.13
ANISOU  1176 CD2  TYR  163 2622    3994    4452    749   1084 -769
ATOM    1177 CE1  TYR  163 -2.546  23.966  65.702 1.000 38.28
ANISOU  1177 CE1  TYR  163 2905    7138    4503    -454  987  -2740
ATOM    1178 CE2  TYR  163 -4.396  22.431  65.726 1.000 37.36
ANISOU  1178 CE2  TYR  163 3220    6336    4640    -273  1997 -1618
ATOM    1179 CZ   TYR  163 -3.500  23.250  66.393 1.000 49.85
ANISOU  1179 CZ   TYR  163 5272    8795    4872    -1810 1593 -2223
ATOM    1180 OH   TYR  163 -3.595  23.365  67.768 1.000 44.81
ANISOU  1180 OH   TYR  163 5246    7368    4413    -222  270  -496
ATOM    1181 N    PHE  164 -1.098  20.651  63.448 1.000 24.84
ANISOU  1181 N    PHE  164 2905    3368    3164    -89   -125 -361
ATOM    1182 CA   PHE  164 -1.045  19.532  64.370 1.000 28.14
ANISOU  1182 CA   PHE  164 3538    3957    3195    223   -163 -30
ATOM    1183 C    PHE  164 -1.360  20.003  65.787 1.000 26.67
ANISOU  1183 C    PHE  164 2964    3937    3234    -473  -194 -257
ATOM    1184 O    PHE  164 -0.540  20.730  66.342 1.000 31.26
ANISOU  1184 O    PHE  164 3119    4888    3869    -959  -260 -519
ATOM    1185 CB   PHE  164 0.347   18.881  64.396 1.000 27.86
ANISOU  1185 CB   PHE  164 3423    3725    3436    76    -199 -32
ATOM    1186 CG   PHE  164 0.744   18.301  63.052 1.000 26.77
ANISOU  1186 CG   PHE  164 2914    3474    3785    -598  74   -275
ATOM    1187 CD1  PHE  164 1.435   19.093  62.143 1.000 26.16
ANISOU  1187 CD1  PHE  164 2827    3836    3278    135   -615 711
ATOM    1188 CD2  PHE  164 0.414   16.996  62.717 1.000 31.24
ANISOU  1188 CD2  PHE  164 4365    2808    4698    349   -298 -96
ATOM    1189 CE1  PHE  164 1.787   18.609  60.894 1.000 30.09
ANISOU  1189 CE1  PHE  164 3609    5052    2771    -148  -1030 641
ATOM    1190 CE2  PHE  164 0.786   16.501  61.475 1.000 38.25
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ANISOU 1190 CE2 PHE   164 6659      4077      3797     -740  -1363  -612
ATOM   1191 CZ  PHE   164 1.494    17.298    60.588   1.000 32.74
ANISOU 1191 CZ  PHE   164 3189      5078      4172      712   -944  -385
ATOM   1192 N   PRO   165 -2.469   19.609    66.379   1.000 30.62
ANISOU 1192 N   PRO   165 3876      4009      3751    -1371   344  -508
ATOM   1193 CA  PRO   165 -2.670   19.813    67.809   1.000 33.09
ANISOU 1193 CA  PRO   165 3299      5764      3510     -190    80  236
ATOM   1194 C   PRO   165 -1.459   19.408    68.638   1.000 36.32
ANISOU 1194 C   PRO   165 3538      5745      4518      664   -191  -234
ATOM   1195 O   PRO   165 -0.776   18.428    68.371   1.000 32.94
ANISOU 1195 O   PRO   165 4268      4761      3487      220    501  387
ATOM   1196 CB  PRO   165 -3.882   18.929    68.123   1.000 38.44
ANISOU 1196 CB  PRO   165 3807      6924      3873     -765    271  827
ATOM   1197 CG  PRO   165 -4.635   18.842    66.845   1.000 35.82
ANISOU 1197 CG  PRO   165 2595      7020      3995        5    688  -828
ATOM   1198 CD  PRO   165 -3.690   19.130    65.710   1.000 33.90
ANISOU 1198 CD  PRO   165 3192      5919      3770    -1149    194   169
ATOM   1199 N   LEU   178 7.727     7.453    68.180   1.000 64.52
ANISOU 1199 N   LEU   178 12297     5376      6843      278   -218  3721
ATOM   1200 CA  LEU   178 7.629     8.260    66.973   1.000 43.31
ANISOU 1200 CA  LEU   178 10557     2730      3168     -984  -2821  -135
ATOM   1201 C   LEU   178 6.159     8.539    66.662   1.000 47.36
ANISOU 1201 C   LEU   178 9239      3530      5225    -2598  -1186  1204
ATOM   1202 O   LEU   178 5.314     7.659    66.796   1.000 56.53
ANISOU 1202 O   LEU   178 11777     5626      4076    -4835   1265  -602
ATOM   1203 CB  LEU   178 8.222     7.582    65.746   1.000 55.55
ANISOU 1203 CB  LEU   178 11470     3734      5902    -1314  -1197  -1822
ATOM   1204 CG  LEU   178 9.662     7.092    65.774   1.000 62.34
ANISOU 1204 CG  LEU   178 10812     5116      7760    -1971    194  -443
ATOM   1205 CD1 LEU   178 9.916     6.185    64.579   1.000 54.23
ANISOU 1205 CD1 LEU   178 9626      4989      5988     1878  -3799  511
ATOM   1206 CD2 LEU   178 10.633    8.264    65.773   1.000 66.44
ANISOU 1206 CD2 LEU   178 11265     3454     10526    -1170   4090  -516
ATOM   1207 N   ARG   179 5.879     9.751    66.192   1.000 52.90
ANISOU 1207 N   ARG   179 7853      3826      8421      102   1230  1031
ATOM   1208 CA  ARG   179 4.495    10.033    65.807   1.000 51.26
ANISOU 1208 CA  ARG   179 7235      4820      7421     -229   1890  -383
ATOM   1209 C   ARG   179 4.242     9.563    64.383   1.000 55.25
ANISOU 1209 C   ARG   179 7178      6083      7731     -946   2260  -1134
ATOM   1210 O   ARG   179 3.120     9.211    64.021   1.000 58.51
ANISOU 1210 O   ARG   179 7036      7628      7565    -1820   3675  -2851
ATOM   1211 CB  ARG   179 4.180    11.512    66.040   1.000 41.49
ANISOU 1211 CB  ARG   179 6600      4448      4716     -155   1916  1137
ATOM   1212 CG  ARG   179 3.293    11.700    67.277   1.000 43.15
ANISOU 1212 CG  ARG   179 6120      5908      4367       90   1338  530
ATOM   1213 CD  ARG   179 1.888    12.059    66.833   1.000 47.63
ANISOU 1213 CD  ARG   179 6180      7453      4463      195    860  -531
ATOM   1214 NE  ARG   179 1.459    13.367    67.269   1.000 52.00
ANISOU 1214 NE  ARG   179 7384      7834      4539     1669  -1168  -538
ATOM   1215 CZ  ARG   179 1.322    14.470    66.556   1.000 64.81
ANISOU 1215 CZ  ARG   179 10838     8000      5788     1457  -1107  63
ATOM   1216 NH1 ARG   179 1.637    14.518    65.268   1.000 59.74
ANISOU 1216 NH1 ARG   179 9535      8090      5074     3628  -2691  445
ATOM   1217 NH2 ARG   179 0.907    15.606    67.117   1.000 65.83
ANISOU 1217 NH2 ARG   179 10451     9083      5478     4171   -776  1200
ATOM   1218 N   MET   180 5.304     9.501    63.589   1.000 43.96
ANISOU 1218 N   MET   180 5383      3769      7550      705    852  -1245
ATOM   1219 CA  MET   180 5.264     9.035    62.210   1.000 40.44
ANISOU 1219 CA  MET   180 2356      5467      7543     -398    574  -1482
ATOM   1220 C   MET   180 6.552     8.258    61.920   1.000 43.91
ANISOU 1220 C   MET   180 2731      6220      7733       18    320  -2324
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ATOM    1221 O   MET 180  7.629   8.679  62.327 1.000 39.46
ANISOU  1221 O   MET 180  2377    5064   7554   -395   906  -912
ATOM    1222 CB  MET 180  5.129  10.189  61.219 1.000 49.84
ANISOU  1222 CB  MET 180  2749    7966   8223   -452  -1114  72
ATOM    1223 CG  MET 180  5.339   9.818  59.757 1.000 62.58
ANISOU  1223 CG  MET 180  7280    8911   7587  -2331 -3353  -505
ATOM    1224 SD  MET 180  4.622  11.015  58.608 1.000 74.24
ANISOU  1224 SD  MET 180  7480   13510   7216   4918  -262  -905
ATOM    1225 CE  MET 180  4.501  10.037  57.110 1.000 79.59
ANISOU  1225 CE  MET 180  6119   20000   4120  -1978  1874  -912
ATOM    1226 N   ALA 181  6.376   7.112  61.275 1.000 37.44
ANISOU  1226 N   ALA 181  3523    5646   5055   -271   882 -1132
ATOM    1227 CA  ALA 181  7.407   6.140  60.986 1.000 37.40
ANISOU  1227 CA  ALA 181  3980    3980   6250   -625  2048  461
ATOM    1228 C   ALA 181  8.287   6.591  59.837 1.000 31.49
ANISOU  1228 C   ALA 181  2975    3842   5149    -32   920  956
ATOM    1229 O   ALA 181  7.834   7.393  58.997 1.000 30.77
ANISOU  1229 O   ALA 181  2903    4021   4765    197   -93  164
ATOM    1230 CB  ALA 181  6.727   4.817  60.620 1.000 42.66
ANISOU  1230 CB  ALA 181  4105    4284   7820  -1023  1629  557
ATOM    1231 N   PRO 182  9.541   6.137  59.840 1.000 24.52
ANISOU  1231 N   PRO 182  2782    4237   2296   -240   -76  320
ATOM    1232 CA  PRO 182 10.442   6.667  58.820 1.000 20.55
ANISOU  1232 CA  PRO 182  2612    2870   2326   -335  -117  -65
ATOM    1233 C   PRO 182  9.958   6.402  57.408 1.000 19.31
ANISOU  1233 C   PRO 182  2609    2491   2236   -391    48  -86
ATOM    1234 O   PRO 182  9.448   5.326  57.080 1.000 21.68
ANISOU  1234 O   PRO 182  2991    2486   2759   -440  -340  -55
ATOM    1235 CB  PRO 182 11.768   5.939  59.047 1.000 24.98
ANISOU  1235 CB  PRO 182  2589    3860   3042   -170  -286  153
ATOM    1236 CG  PRO 182 11.681   5.351  60.393 1.000 28.42
ANISOU  1236 CG  PRO 182  3352    3582   3863    656   321 1038
ATOM    1237 CD  PRO 182 10.215   5.210  60.747 1.000 32.21
ANISOU  1237 CD  PRO 182  3333    4905   4000   -826  -390 1785
ATOM    1238 N   HIS 183 10.111   7.414  56.561 1.000 19.27
ANISOU  1238 N   HIS 183  2131    2658   2533   -274  -204  176
ATOM    1239 CA  HIS 183  9.757   7.306  55.144 1.000 18.01
ANISOU  1239 CA  HIS 183  1882    2311   2652   -341  -455  346
ATOM    1240 C   HIS 183 10.749   8.124  54.337 1.000 15.74
ANISOU  1240 C   HIS 183  1964    1560   2456    -75  -352  128
ATOM    1241 O   HIS 183 11.355   9.061  54.868 1.000 18.14
ANISOU  1241 O   HIS 183  2297    2093   2504   -509  -127  -135
ATOM    1242 CB  HIS 183  8.338   7.781  54.835 1.000 18.66
ANISOU  1242 CB  HIS 183  1970    2173   2945   -136  -243  371
ATOM    1243 CG  HIS 183  8.089   9.120  55.447 1.000 26.67
ANISOU  1243 CG  HIS 183  3100    2751   4281    262   222  -306
ATOM    1244 ND1 HIS 183  7.884   9.362  56.800 1.000 35.36
ANISOU  1244 ND1 HIS 183  4432    4078   4926  -1190  1466 -1454
ATOM    1245 CD2 HIS 183  8.051  10.311  54.821 1.000 33.00
ANISOU  1245 CD2 HIS 183  4117    2522   5898   1687  -677  -173
ATOM    1246 CE1 HIS 183  7.739  10.658  56.980 1.000 35.91
ANISOU  1246 CE1 HIS 183  2611    4468   6565   -472  -625 -2616
ATOM    1247 NE2 HIS 183  7.829  11.251  55.798 1.000 40.55
ANISOU  1247 NE2 HIS 183  4375    3417   7614   1821 -1013 -1590
ATOM    1248 N   TYR 184 10.890   7.778  53.061 1.000 15.68
ANISOU  1248 N   TYR 184  1973    1551   2434   -124  -470  107
ATOM    1249 CA  TYR 184 11.605   8.685  52.152 1.000 14.81
ANISOU  1249 CA  TYR 184  1798    1392   2438    147  -312  145
ATOM    1250 C   TYR 184 10.572   9.239  51.169 1.000 14.53
ANISOU  1250 C   TYR 184  1656    1449   2416    -70  -399   98
ATOM    1251 O   TYR 184  9.468   8.728  51.045 1.000 15.83
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ANISOU 1251 O   TYR  184 1717   1383   2916  -103  -443 150
ATOM   1252 CB  TYR  184 12.699  8.004  51.360 1.000 15.66
ANISOU 1252 CB  TYR  184 1686   1323   2943   69  -366  -168
ATOM   1253 CG  TYR  184 12.383  6.785  50.562 1.000 14.85
ANISOU 1253 CG  TYR  184 1743   1313   2586  109  -567 4 3
ATOM   1254 CD1 TYR  184 12.200  5.540  51.185 1.000 15.49
ANISOU 1254 CD1 TYR  184 1549   1315   3021  -29  -575 190
ATOM   1255 CD2 TYR  184 12.329  6.836  49.165 1.000 15.89
ANISOU 1255 CD2 TYR  184 1724   1763   2552   55  -27 - 6 4
ATOM   1256 CE1 TYR  184 11.962  4.396  50.442 1.000 15.61
ANISOU 1256 CE1 TYR  184 1695   1244   2992  229  -137 113
ATOM   1257 CE2 TYR  184 12.130  5.661  48.447 1.000 17.52
ANISOU 1257 CE2 TYR  184 2340   1776   2540    4   83 - 9 0
ATOM   1258 CZ  TYR  184 11.915  4.449  49.083 1.000 16.96
ANISOU 1258 CZ  TYR  184 1695   1736   3014  -156  -480 3 4
ATOM   1259 OH  TYR  184 11.682  3.325  48.310 1.000 18.81
ANISOU 1259 OH  TYR  184 2020   1775   3352  260  -277 - 312
ATOM   1260 N   ASP  185 10.924 10.330  50.502 1.000 14.36
ANISOU 1260 N   ASP  185 1518   1599   2338   87  -225  276
ATOM   1261 CA  ASP  185 10.026 11.005  49.574 1.000 13.88
ANISOU 1261 CA  ASP  185 1875   1322   2078  141  -364 - 4 2
ATOM   1262 C   ASP  185 10.240 10.490  48.152 1.000 12.57
ANISOU 1262 C   ASP  185 1182   1385   2211  -160  -77  - 130
ATOM   1263 O   ASP  185 11.357 10.135  47.824 1.000 14.14
ANISOU 1263 O   ASP  185 1177   1637   2559  -135  146  140
ATOM   1264 CB  ASP  185 10.294 12.521  49.580 1.000 14.97
ANISOU 1264 CB  ASP  185 1879   1293   2517  121  -186 -159
ATOM   1265 CG  ASP  185 9.702 13.155  50.830 1.000 17.61
ANISOU 1265 CG  ASP  185 2680   1659   2351  232  -13  - 172
ATOM   1266 OD1 ASP  185 9.507 12.466  51.856 1.000 23.69
ANISOU 1266 OD1 ASP  185 3553   3133   2314  443  -302 521
ATOM   1267 OD2 ASP  185 9.174 14.257  50.742 1.000 24.32
ANISOU 1267 OD2 ASP  185 4063   1730   3449  644  1140 - 16
ATOM   1268 N   LEU  186 9.141 10.465  47.382 1.000 12.57
ANISOU 1268 N   LEU  186 1271   1378   2126  -117  -117 - 117
ATOM   1269 CA  LEU  186 9.169 10.091  45.986 1.000 12.92
ANISOU 1269 CA  LEU  186 1533   1225   2150  -331  -84  - 175
ATOM   1270 C   LEU  186 9.134 11.292  45.052 1.000 14.12
ANISOU 1270 C   LEU  186 1730   1307   2330  -93  -165 5 5
ATOM   1271 O   LEU  186 8.971 11.173  43.849 1.000 20.12
ANISOU 1271 O   LEU  186 3721   1643   2280  -423  99 9 2
ATOM   1272 CB  LEU  186 8.040  9.106  45.609 1.000 13.72
ANISOU 1272 CB  LEU  186 1509   1310   2393  -270  -375 - 6
ATOM   1273 CG  LEU  186 8.020  7.811  46.438 1.000 15.92
ANISOU 1273 CG  LEU  186 1549   1141   3361  -145  -307 168
ATOM   1274 CD1 LEU  186 6.929  6.908  45.866 1.000 19.36
ANISOU 1274 CD1 LEU  186 1686   1845   3825  -700  -209 396
ATOM   1275 CD2 LEU  186 9.369  7.115  46.341 1.000 18.32
ANISOU 1275 CD2 LEU  186 1689   1742   3528  200  -432 179
ATOM   1276 N   SER  187 9.286 12.494  45.618 1.000 13.60
ANISOU 1276 N   SER  187 1326   1234   2608  -26  -95  1 3 7
ATOM   1277 CA  SER  187 9.388 13.734  44.826 1.000 13.22
ANISOU 1277 CA  SER  187 1489   1197   2338  -54  -68  2 9
ATOM   1278 C   SER  187 10.736 13.853  44.134 1.000 12.79
ANISOU 1278 C   SER  187 1482   1186   2192  -17  -114 - 9 0
ATOM   1279 O   SER  187 11.683 13.076  44.356 1.000 14.50
ANISOU 1279 O   SER  187 1532   1257   2720   76  -224  -113
ATOM   1280 CB  SER  187 9.201 14.915  45.811 1.000 12.87
ANISOU 1280 CB  SER  187 1463   1282   2147  164  -154 9 8
ATOM   1281 OG  SER  187 10.296 14.873  46.716 1.000 13.22
ANISOU 1281 OG  SER  187 1589   1420   2015  -34  -143 2 2 4
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ATOM    1282 N    MET   188 10.898  14.844  43.292 1.000 13.44
ANISOU  1282 N    MET   188 1552    1334    2221    -64   -34  - 26
ATOM    1283 CA   MET   188 12.215  15.380  42.878 1.000 12.11
ANISOU  1283 CA   MET   188 1508    1261    1833     29   -60  - 61
ATOM    1284 C    MET   188 12.853  16.022  44.104 1.000 12.78
ANISOU  1284 C    MET   188 1563    1156    2136    167  -311  - 42
ATOM    1285 O    MET   188 13.896  15.550  44.600 1.000 13.40
ANISOU  1285 O    MET   188 1408    1390    2294    116  -264  - 26
ATOM    1286 CB   MET   188 12.038  16.300  41.667 1.000 13.66
ANISOU  1286 CB   MET   188 1565    1501    2123     44  -161   207
ATOM    1287 CG   MET   188 13.296  17.095  41.315 1.000 14.05
ANISOU  1287 CG   MET   188 1697    1595    2046     66  150 133
ATOM    1288 SD   MET   188 14.600  15.971  40.752 1.000 14.96
ANISOU  1288 SD   MET   188 1565    1591    2529    109   -81   110
ATOM    1289 CE   MET   188 16.005  17.102  40.686 1.000 17.74
ANISOU  1289 CE   MET   188 1852    2032    2855   -242   505   121
ATOM    1290 N    VAL   189 12.244  17.112  44.616 1.000 12.62
ANISOU  1290 N    VAL   189 1586    1203    2007    103  -147 - 134
ATOM    1291 CA   VAL   189 12.565  17.671  45.918 1.000 12.60
ANISOU  1291 CA   VAL   189 1412    1438    1937   -228   -11  - 44
ATOM    1292 C    VAL   189 11.285  17.968  46.679 1.000 11.71
ANISOU  1292 C    VAL   189 1328    1294    1825   -170  -171 - 49
ATOM    1293 O    VAL   189 10.227  18.099  46.050 1.000 12.56
ANISOU  1293 O    VAL   189 1446    1291    2036     21  -320  - 49
ATOM    1294 CB   VAL   189 13.440  18.955  45.856 1.000 12.95
ANISOU  1294 CB   VAL   189 1150    1517    2252   -174  -205 9 4
ATOM    1295 CG1  VAL   189 14.778  18.637  45.167 1.000 15.54
ANISOU  1295 CG1  VAL   189 1376    2094    2437   -140   161  9 1
ATOM    1296 CG2  VAL   189 12.730  20.056  45.082 1.000 15.00
ANISOU  1296 CG2  VAL   189 1763    1391    2547   -130  -483 8 1
ATOM    1297 N    THR   190 11.425  18.067  47.984 1.000 12.18
ANISOU  1297 N    THR   190 1445    1422    1760   -109  -130 1 0
ATOM    1298 CA   THR   190 10.353  18.454  48.897 1.000 11.98
ANISOU  1298 CA   THR   190 1292    1356    1903    -57  -221 - 151
ATOM    1299 C    THR   190 10.879  19.630  49.710 1.000 12.47
ANISOU  1299 C    THR   190 1178    1436    2124    -32  -297 - 232
ATOM    1300 O    THR   190 11.959  19.523  50.320 1.000 15.06
ANISOU  1300 O    THR   190 1424    1767    2531     46  -571  - 446
ATOM    1301 CB   THR   190 9.913   17.297  49.808 1.000 13.16
ANISOU  1301 CB   THR   190 1509    1605    1886   -168    80  - 121
ATOM    1302 OG1  THR   190 9.481   16.201  48.993 1.000 14.47
ANISOU  1302 OG1  THR   190 1693    1469    2334   -100   -25  - 194
ATOM    1303 CG2  THR   190 8.778   17.723  50.734 1.000 14.79
ANISOU  1303 CG2  THR   190 1696    1510    2415     73  258 - 89
ATOM    1304 N    LEU   191 10.148  20.724  49.732 1.000 12.97
ANISOU  1304 N    LEU   191 1329    1449    2149     23   -21 - 286
ATOM    1305 CA   LEU   191 10.511  21.908  50.526 1.000 13.75
ANISOU  1305 CA   LEU   191 1543    1442    2238     78  -206  - 301
ATOM    1306 C    LEU   191 9.603   21.964  51.763 1.000 14.47
ANISOU  1306 C    LEU   191 1543    1689    2265     83  -179  - 412
ATOM    1307 O    LEU   191 8.370   21.868  51.645 1.000 16.58
ANISOU  1307 O    LEU   191 1517    2486    2297    219  -176 - 725
ATOM    1308 CB   LEU   191 10.398  23.212  49.722 1.000 15.37
ANISOU  1308 CB   LEU   191 1717    1444    2680     58  -106  - 189
ATOM    1309 CG   LEU   191 11.705  23.578  48.973 1.000 16.10
ANISOU  1309 CG   LEU   191 1747    1688    2680   -128  -113 - 135
ATOM    1310 CD1  LEU   191 12.069  22.565  47.906 1.000 16.67
ANISOU  1310 CD1  LEU   191 2034    2093    2209    -23   -64   1 9
ATOM    1311 CD2  LEU   191 11.570  24.959  48.350 1.000 18.53
ANISOU  1311 CD2  LEU   191 2297    1906    2837   -345  -437 148
ATOM    1312 N    ILE   192 10.199  22.148  52.946 1.000 15.36
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ANISOU 1312 N   ILE   192 1479    2152    2204   -47   -165 -164
ATOM   1313 CA  ILE   192 9.417   22.162  54.194 1.000 15.13
ANISOU 1313 CA  ILE   192 1456    2043    2251   -304  -173 -280
ATOM   1314 C   ILE   192 9.692   23.423  55.010 1.000 15.58
ANISOU 1314 C   ILE   192 1696    1973    2251   -199  -254 -226
ATOM   1315 O   ILE   192 10.836  23.691  55.381 1.000 17.20
ANISOU 1315 O   ILE   192 1856    2449    2229   -307  -341 -574
ATOM   1316 CB  ILE   192 9.722   20.920  55.040 1.000 17.03
ANISOU 1316 CB  ILE   192 2246    1958    2266   -52   325  -303
ATOM   1317 CG1 ILE   192 9.454   19.596  54.317 1.000 19.80
ANISOU 1317 CG1 ILE   192 3040    2010    2473   -71   128  -382
ATOM   1318 CG2 ILE   192 8.995   20.967  56.403 1.000 18.14
ANISOU 1318 CG2 ILE   192 2278    2354    2262   229   290  -258
ATOM   1319 CD1 ILE   192 9.420   18.387  55.235 1.000 31.57
ANISOU 1319 CD1 ILE   192 4658    2114    5222   -398  -1094 765
ATOM   1320 N   GLN   193 8.625   24.172  55.249 1.000 17.04
ANISOU 1320 N   GLN   193 2042    2185    2248   112   -388 -301
ATOM   1321 CA  GLN   193 8.680   25.291  56.201 1.000 17.70
ANISOU 1321 CA  GLN   193 1737    2167    2824   -204  -186 -559
ATOM   1322 C   GLN   193 7.898   24.869  57.443 1.000 19.67
ANISOU 1322 C   GLN   193 1882    2624    2969   -232  211  -840
ATOM   1323 O   GLN   193 7.082   23.942  57.426 1.000 26.60
ANISOU 1323 O   GLN   193 2066    3843    4197   -965  -110 6 2
ATOM   1324 CB  GLN   193 8.129   26.598  55.643 1.000 23.74
ANISOU 1324 CB  GLN   193 3070    2388    3561   500   -98  -514
ATOM   1325 CG  GLN   193 8.913   27.304  54.559 1.000 28.26
ANISOU 1325 CG  GLN   193 4664    2384    3689   656   209  0
ATOM   1326 CD  GLN   193 8.338   28.665  54.156 1.000 26.30
ANISOU 1326 CD  GLN   193 2868    2943    4181   791   3   111
ATOM   1327 OE1 GLN   193 7.193   28.695  53.688 1.000 45.31
ANISOU 1327 OE1 GLN   193 2826    7147    7241   -51   -616 3173
ATOM   1328 NE2 GLN   193 9.080   29.748  54.345 1.000 30.44
ANISOU 1328 NE2 GLN   193 3609    2588    5368   413   1259 692
ATOM   1329 N   GLN   194 8.241   25.259  58.645 1.000 22.04
ANISOU 1329 N   GLN   194 2926    2758    2690   303   -368 -83
ATOM   1330 CA  GLN   194 7.569   24.793  59.847 1.000 22.68
ANISOU 1330 CA  GLN   194 3144    2617    2855   82 -230  -150
ATOM   1331 C   GLN   194 7.275   26.054  60.663 1.000 22.19
ANISOU 1331 C   GLN   194 2809    2768    2856   117   -396 -320
ATOM   1332 O   GLN   194 7.889   27.100  60.418 1.000 25.26
ANISOU 1332 O   GLN   194 4041    2877    2679   -313  -21  -411
ATOM   1333 CB  GLN   194 8.467   23.943  60.739 1.000 29.21
ANISOU 1333 CB  GLN   194 4493    2707    3899   477   -50  939
ATOM   1334 CG  GLN   194 9.105   22.735  60.083 1.000 28.80
ANISOU 1334 CG  GLN   194 3108    3530    4305   576   -121 494
ATOM   1335 CD  GLN   194 10.296  22.332  60.962 1.000 31.97
ANISOU 1335 CD  GLN   194 2961    5384    3800   824   359  1075
ATOM   1336 OE1 GLN   194 11.421  22.325  60.474 1.000 27.28
ANISOU 1336 OE1 GLN   194 2781    4189    3397   118   133  -249
ATOM   1337 NE2 GLN   194 9.998   22.100  62.232 1.000 29.82
ANISOU 1337 NE2 GLN   194 3540    3958    3832   989   645  800
ATOM   1338 N   THR   195 6.419   25.891  61.658 1.000 23.30
ANISOU 1338 N   THR   195 2407    3058    3387   -211  -235 -720
ATOM   1339 CA  THR   195 6.476   26.833  62.768 1.000 27.14
ANISOU 1339 CA  THR   195 3459    3544    3308   25 -50 -890
ATOM   1340 C   THR   195 6.933   25.997  63.958 1.000 26.11
ANISOU 1340 C   THR   195 3825    2829    3268   558   19 -1247
ATOM   1341 O   THR   195 6.639   24.815  63.994 1.000 28.17
ANISOU 1341 O   THR   195 2973    2916    4815   481   171  -1030
ATOM   1342 CB  THR   195 5.149   27.534  63.069 1.000 25.87
ANISOU 1342 CB  THR   195 3428    2849    3551   -16   -592 -1137
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ATOM   1343 OG1 THR  195 4.111  26.550  63.196 1.000 25.45
ANISOU 1343 OG1 THR  195 3427  3101   3141   -9 -117  -750
ATOM   1344 CG2 THR  195 4.788  28.396  61.847 1.000 31.31
ANISOU 1344 CG2 THR  195 4965  2552   4380   274  -70  -409
ATOM   1345 N   PRO  196 7.604  26.587  64.923 1.000 30.84
ANISOU 1345 N   PRO  196 5225  3191   3300   785 -517 -1542
ATOM   1346 CA  PRO  196 8.101  25.823  66.065 1.000 28.50
ANISOU 1346 CA  PRO  196 3113  3700   4016  -279 -441  -646
ATOM   1347 C   PRO  196 7.018  25.534  67.096 1.000 28.97
ANISOU 1347 C   PRO  196 3581  3326   4102   42 113 -1381
ATOM   1348 O   PRO  196 6.002  26.229  67.192 1.000 32.32
ANISOU 1348 O   PRO  196 4146  4649   3485   901 -180 -1658
ATOM   1349 CB  PRO  196 9.094  26.816  66.694 1.000 29.72
ANISOU 1349 CB  PRO  196 3888  3292   4111  -285 -353 -1072
ATOM   1350 CG  PRO  196 8.533  28.174  66.364 1.000 34.87
ANISOU 1350 CG  PRO  196 6285  3575   3390   421 -1326 -1332
ATOM   1351 CD  PRO  196 7.897  28.035  65.012 1.000 33.20
ANISOU 1351 CD  PRO  196 6407  3606   2600  -598 -494 -1031
ATOM   1352 N   CYS  197 7.289  24.533  67.919 1.000 26.96
ANISOU 1352 N   CYS  197 2739  4038   3465  -113  85 -1227
ATOM   1353 CA  CYS  197 6.519  24.289  69.126 1.000 31.73
ANISOU 1353 CA  CYS  197 3979  4543   3533  -39  721 -1726
ATOM   1354 C   CYS  197 6.803  25.412  70.124 1.000 35.58
ANISOU 1354 C   CYS  197 4213  4819   4486  -480 1126 -2282
ATOM   1355 O   CYS  197 7.917  25.939  70.175 1.000 31.34
ANISOU 1355 O   CYS  197 3817  4845   3246   36 -383  -992
ATOM   1356 CB  CYS  197 6.940  22.962  69.767 1.000 35.79
ANISOU 1356 CB  CYS  197 5913  4705   2980   284 1566 -1423
ATOM   1357 SG  CYS  197 6.553  21.535  68.741 1.000 28.53
ANISOU 1357 SG  CYS  197 3605  4224   3009   50 -5  -452
ATOM   1358 N   ALA  198 5.771  25.791  70.866 1.000 37.27
ANISOU 1358 N   ALA  198 5038  4984   4139  -421 1647 -2070
ATOM   1359 CA  ALA  198 5.983  26.811  71.888 1.000 35.91
ANISOU 1359 CA  ALA  198 6273  4144   3230   910  522 -1230
ATOM   1360 C   ALA  198 6.993  26.328  72.921 1.000 44.30
ANISOU 1360 C   ALA  198 5998  6138   4696  -193 -199  33
ATOM   1361 O   ALA  198 7.759  27.127  73.457 1.000 42.85
ANISOU 1361 O   ALA  198 5209  6328   4742   7  490  -555
ATOM   1362 CB  ALA  198 4.671  27.231  72.532 1.000 41.70
ANISOU 1362 CB  ALA  198 7588  5697   2557  2355 1068  -721
ATOM   1363 N   ASN  199 7.036  25.036  73.225 1.000 34.93
ANISOU 1363 N   ASN  199 4027  5975   3270   805  167  -621
ATOM   1364 CA  ASN  199 7.969  24.578  74.264 1.000 33.58
ANISOU 1364 CA  ASN  199 3643  6167   2950  -670 -265  -808
ATOM   1365 C   ASN  199 9.352  24.262  73.718 1.000 31.53
ANISOU 1365 C   ASN  199 4077  5048   2853   384 -420  -855
ATOM   1366 O   ASN  199 10.153 23.667  74.467 1.000 36.33
ANISOU 1366 O   ASN  199 4223  5624   3957  -403 -1305 -126
ATOM   1367 CB  ASN  199 7.441  23.308  74.929 1.000 36.38
ANISOU 1367 CB  ASN  199 4533  5029   4262   859  584  -522
ATOM   1368 CG  ASN  199 7.198  22.180  73.952 1.000 31.28
ANISOU 1368 CG  ASN  199 4030  4863   2993   882  202  178
ATOM   1369 OD1 ASN  199 7.743  22.151  72.853 1.000 37.62
ANISOU 1369 OD1 ASN  199 4693  6272   3330   122  728  -56
ATOM   1370 ND2 ASN  199 6.393  21.190  74.314 1.000 36.42
ANISOU 1370 ND2 ASN  199 3508  6251   4078  -13 1132  -958
ATOM   1371 N   GLY  200 9.616  24.569  72.449 1.000 30.93
ANISOU 1371 N   GLY  200 4342  4232   3179   436  144  -692
ATOM   1372 CA  GLY  200 10.920 24.304  71.866 1.000 35.26
ANISOU 1372 CA  GLY  200 4430  4905   4060  -317  480 -2400
ATOM   1373 C   GLY  200 11.184 22.886  71.429 1.000 36.83
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ANISOU 1373 C    GLY  200 4683      4375      4936     -360   1601 -1460
ATOM   1374 O    GLY  200 12.257    22.566    70.897 1.000 32.71
ANISOU 1374 O    GLY  200 3921      4072      4436     -377    752  -1400
ATOM   1375 N    PHE  201 10.264    21.939    71.588 1.000 28.66
ANISOU 1375 N    PHE  201 3813      4229      2847      145    463   -326
ATOM   1376 CA   PHE  201 10.491    20.575    71.106 1.000 27.55
ANISOU 1376 CA   PHE  201 3190      4337      2943     -233    219   -672
ATOM   1377 C    PHE  201 10.752    20.553    69.600 1.000 24.89
ANISOU 1377 C    PHE  201 2943      3682      2832      190   -268   -379
ATOM   1378 O    PHE  201 9.994     21.255    68.910 1.000 28.22
ANISOU 1378 O    PHE  201 3583      3184      3957       10   -421    277
ATOM   1379 CB   PHE  201 9.250     19.729    71.413 1.000 30.46
ANISOU 1379 CB   PHE  201 3153      4862      3560     -371    -40    -73
ATOM   1380 CG   PHE  201 9.425     18.262    71.027 1.000 34.89
ANISOU 1380 CG   PHE  201 4015      4609      4632     -772    162      89
ATOM   1381 CD1  PHE  201 10.395    17.472    71.605 1.000 31.18
ANISOU 1381 CD1  PHE  201 3436      4103      4310     -875    -93   -1105
ATOM   1382 CD2  PHE  201 8.613     17.681    70.078 1.000 28.84
ANISOU 1382 CD2  PHE  201 2979      4019      3960      329    612   -107
ATOM   1383 CE1  PHE  201 10.564    16.160    71.240 1.000 37.73
ANISOU 1383 CE1  PHE  201 6489      3608      4239    -1078  -1475   -500
ATOM   1384 CE2  PHE  201 8.761     16.363    69.679 1.000 31.78
ANISOU 1384 CE2  PHE  201 4327      3911      3838      652    250    119
ATOM   1385 CZ   PHE  201 9.755     15.606    70.265 1.000 29.78
ANISOU 1385 CZ   PHE  201 3705      3397      4211        6   -638   -849
ATOM   1386 N    VAL  202 11.706    19.751    69.144 1.000 23.51
ANISOU 1386 N    VAL  202 2671      3392      2868     -292     -1   -578
ATOM   1387 CA   VAL  202 11.969    19.626    67.706 1.000 26.37
ANISOU 1387 CA   VAL  202 3025      4050      2946     -667     57   -724
ATOM   1388 C    VAL  202 11.423    18.283    67.198 1.000 22.75
ANISOU 1388 C    VAL  202 2729      3348      2567       96   -120   -435
ATOM   1389 O    VAL  202 11.880    17.190    67.541 1.000 28.71
ANISOU 1389 O    VAL  202 3249      3799      3859      119     31    661
ATOM   1390 CB   VAL  202 13.476    19.721    67.415 1.000 24.99
ANISOU 1390 CB   VAL  202 3060      3427      3008     -278    283    152
ATOM   1391 CG1  VAL  202 13.715    19.464    65.938 1.000 27.70
ANISOU 1391 CG1  VAL  202 4642      2577      3307       87   1014     -3
ATOM   1392 CG2  VAL  202 14.050    21.071    67.823 1.000 26.80
ANISOU 1392 CG2  VAL  202 2826      3868      3487     -490    474   -398
ATOM   1393 N    SER  203 10.405    18.402    66.333 1.000 24.10
ANISOU 1393 N    SER  203 2194      3607      3356      -31   -179   -528
ATOM   1394 CA   SER  203 9.634     17.231    65.940 1.000 23.70
ANISOU 1394 CA   SER  203 2373      3584      3046     -290    308   -533
ATOM   1395 C    SER  203 10.168    16.511    64.710 1.000 21.28
ANISOU 1395 C    SER  203 2173      3041      2871       46    227    -42
ATOM   1396 O    SER  203 10.159    15.285    64.640 1.000 27.60
ANISOU 1396 O    SER  203 4105      3097      3284     -482   1010   -249
ATOM   1397 CB   SER  203 8.148     17.571    65.685 1.000 29.06
ANISOU 1397 CB   SER  203 2251      3790      5001     -180    203   -2064
ATOM   1398 OG   SER  203 7.584     18.175    66.843 1.000 32.55
ANISOU 1398 OG   SER  203 3840      4298      4231      920   1099   -382
ATOM   1399 N    LEU  204 10.688    17.233    63.724 1.000 22.46
ANISOU 1399 N    LEU  204 2476      3013      3043       79    450    -46
ATOM   1400 CA   LEU  204 11.166    16.530    62.544 1.000 20.26
ANISOU 1400 CA   LEU  204 2200      2831      2667       45    -18    -15
ATOM   1401 C    LEU  204 12.595    16.038    62.747 1.000 18.83
ANISOU 1401 C    LEU  204 2151      2528      2477      -75     60     -1
ATOM   1402 O    LEU  204 13.443    16.783    63.251 1.000 20.47
ANISOU 1402 O    LEU  204 2333      2386      3059     -303   -195    404
ATOM   1403 CB   LEU  204 11.103    17.486    61.362 1.000 21.42
ANISOU 1403 CB   LEU  204 2718      2548      2871      311    -16     -8
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ATOM    1404 CG   LEU  204  9.769    18.183   61.079 1.000 33.57
ANISOU  1404 CG   LEU  204  2820     4319     5617    177  -1316   1172
ATOM    1405 CD1  LEU  204  9.797    18.747   59.660 1.000 36.19
ANISOU  1405 CD1  LEU  204  4402     3807     5540    1276 -1167   987
ATOM    1406 CD2  LEU  204  8.581    17.234   61.219 1.000 37.76
ANISOU  1406 CD2  LEU  204  3058     5328     5960    -526 -1896   686
ATOM    1407 N    GLN  205  12.864   14.836   62.284 1.000 20.33
ANISOU  1407 N    GLN  205  2518     2644     2563    104  -31    -129
ATOM    1408 CA   GLN  205  14.209   14.247   62.335 1.000 18.88
ANISOU  1408 CA   GLN  205  2522     2225     2425    -6   -181   36
ATOM    1409 C    GLN  205  14.512   13.504   61.036 1.000 18.19
ANISOU  1409 C    GLN  205  1986     2383     2543    -143 -188   -80
ATOM    1410 O    GLN  205  13.577   13.033   60.408 1.000 19.87
ANISOU  1410 O    GLN  205  1974     3063     2514    -125 -212   -237
ATOM    1411 CB   GLN  205  14.296   13.267   63.493 1.000 24.25
ANISOU  1411 CB   GLN  205  3948     2716     2548    202  -343   296
ATOM    1412 CG   GLN  205  14.164   13.948   64.856 1.000 30.64
ANISOU  1412 CG   GLN  205  4099     5159     2382    850  -327   -89
ATOM    1413 CD   GLN  205  14.744   13.078   65.948 1.000 28.28
ANISOU  1413 CD   GLN  205  4473     3633     2640    -161 -1015  -390
ATOM    1414 OE1  GLN  205  14.307   11.921   66.041 1.000 37.69
ANISOU  1414 OE1  GLN  205  5733     5073     3515    -2145 -699  478
ATOM    1415 NE2  GLN  205  15.710   13.553   66.711 1.000 40.53
ANISOU  1415 NE2  GLN  205  6798     4417     4185    -1341 -2865 323
ATOM    1416 N    ALA  206  15.752   13.471   60.576 1.000 18.52
ANISOU  1416 N    ALA  206  2070     2199     2769    -240 -13    4
ATOM    1417 CA   ALA  206  16.152   12.700   59.405 1.000 18.42
ANISOU  1417 CA   ALA  206  2074     2351     2575    -100 -158   23
ATOM    1418 C    ALA  206  17.343   11.802   59.738 1.000 17.41
ANISOU  1418 C    ALA  206  2107     2158     2350    -185 -254   -17
ATOM    1419 O    ALA  206  18.123   12.203   60.613 1.000 20.67
ANISOU  1419 O    ALA  206  2469     2410     2973    -48  -711   -396
ATOM    1420 CB   ALA  206  16.637   13.599   58.270 1.000 18.77
ANISOU  1420 CB   ALA  206  2119     2310     2703    156  -65    147
ATOM    1421 N    GLU  207  17.492   10.764   58.931 1.000 18.09
ANISOU  1421 N    GLU  207  2092     2101     2680    -249 -496   -162
ATOM    1422 CA   GLU  207  18.710   9.944    58.966 1.000 19.48
ANISOU  1422 CA   GLU  207  2210     2091     3100    -73  -432   -44
ATOM    1423 C    GLU  207  19.851   10.730   58.320 1.000 19.98
ANISOU  1423 C    GLU  207  2018     2233     3342    220  -560   544
ATOM    1424 O    GLU  207  19.732   11.068   57.143 1.000 20.33
ANISOU  1424 O    GLU  207  2000     2753     2970    5    -471   89
ATOM    1425 CB   GLU  207  18.566   8.623    58.214 1.000 24.03
ANISOU  1425 CB   GLU  207  3401     1784     3946    316  -1226  61
ATOM    1426 CG   GLU  207  19.757   7.674    58.295 1.000 24.35
ANISOU  1426 CG   GLU  207  3223     1907     4121    354  93     467
ATOM    1427 CD   GLU  207  20.730   7.791    57.129 1.000 31.69
ANISOU  1427 CD   GLU  207  2729     5178     4134    -1218 -175  122
ATOM    1428 OE1  GLU  207  20.376   7.611    55.943 1.000 26.97
ANISOU  1428 OE1  GLU  207  2849     3404     3993    31   -256   309
ATOM    1429 OE2  GLU  207  21.908   8.121    57.407 1.000 30.70
ANISOU  1429 OE2  GLU  207  2484     3416     5764    -233 -342   -1168
ATOM    1430 N    VAL  208  20.919   10.936   59.078 1.000 18.53
ANISOU  1430 N    VAL  208  2020     2112     2907    130  -362   320
ATOM    1431 CA   VAL  208  22.150   11.547   58.541 1.000 19.53
ANISOU  1431 CA   VAL  208  2044     2238     3137    39   -476   630
ATOM    1432 C    VAL  208  23.341   10.755   59.088 1.000 21.95
ANISOU  1432 C    VAL  208  2040     2792     3507    225  -461   797
ATOM    1433 O    VAL  208  23.460   10.663   60.314 1.000 23.82
ANISOU  1433 O    VAL  208  2262     3240     3547    -40  -858   825
ATOM    1434 CB   VAL  208  22.271   13.027   58.905 1.000 19.72
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ANISOU 1434 CB  VAL   208 1918    2429    3145    -47    -308 3 1 1
ATOM   1435 CG1 VAL   208 23.524  13.626  58.281  1.000  23.14
ANISOU 1435 CG1 VAL   208 2524    2374    3895    -202   284  3 4 9
ATOM   1436 CG2 VAL   208 21.030  13.812  58.469  1.000  19.47
ANISOU 1436 CG2 VAL   208 2462    2279    2658    232    -667 - 8 7
ATOM   1437 N   GLY   209 24.180  10.169  58.246  1.000  23.88
ANISOU 1437 N   GLY   209 2500    2449    4123    465    -711 3 6
ATOM   1438 CA  GLY   209 25.306  9.374   58.773  1.000  26.42
ANISOU 1438 CA  GLY   209 1987    3599    4450    460    -487 5 1 6
ATOM   1439 C   GLY   209 24.905  8.250   59.695  1.000  30.01
ANISOU 1439 C   GLY   209 3469    3240    4693    238    -1422 7 3 2
ATOM   1440 O   GLY   209 25.609  7.835   60.629  1.000  31.45
ANISOU 1440 O   GLY   209 4053    4458    3438    1225   -897 8 3
ATOM   1441 N   GLY   210 23.691  7.702   59.523  1.000  26.64
ANISOU 1441 N   GLY   210 3165    3214    3744    259    -86  3 5 0
ATOM   1442 CA  GLY   210 23.263  6.585   60.360  1.000  29.78
ANISOU 1442 CA  GLY   210 4603    3091    3619    -55    -997 5 8 4
ATOM   1443 C   GLY   210 22.622  6.993   61.663  1.000  38.28
ANISOU 1443 C   GLY   210 5827    4212    4507    -2536  732  5 0
ATOM   1444 O   GLY   210 22.160  6.187   62.481  1.000  41.45
ANISOU 1444 O   GLY   210 4152    6516    5082    -1874  -567 2346
ATOM   1445 N   ALA   211 22.512  8.274   61.976  1.000  32.81
ANISOU 1445 N   ALA   211 4803    4625    3037    1372   -1177 6 3 2
ATOM   1446 CA  ALA   211 21.828  8.603   63.235  1.000  35.62
ANISOU 1446 CA  ALA   211 3993    5958    3584    1061   -610 9 7 0
ATOM   1447 C   ALA   211 20.663  9.543   62.940  1.000  31.43
ANISOU 1447 C   ALA   211 3508    4737    3699    302    69 1 8 5 4
ATOM   1448 O   ALA   211 20.652  10.097  61.858  1.000  28.28
ANISOU 1448 O   ALA   211 3661    4062    3020    -571   -551 1010
ATOM   1449 CB  ALA   211 22.812  9.278   64.170  1.000  41.36
ANISOU 1449 CB  ALA   211 3644    8904    3169    1372   -18  - 7 9 1
ATOM   1450 N   PHE   212 19.682  9.676   63.825  1.000  36.68
ANISOU 1450 N   PHE   212 5211    4237    4489    1166   1265 2171
ATOM   1451 CA  PHE   212 18.620  10.654  63.641  1.000  28.82
ANISOU 1451 CA  PHE   212 4490    3167    3293    263    504  1037
ATOM   1452 C   PHE   212 19.100  12.023  64.124  1.000  34.72
ANISOU 1452 C   PHE   212 6746    3760    2685    -248   -539 7 7 6
ATOM   1453 O   PHE   212 19.667  12.191  65.210  1.000  39.12
ANISOU 1453 O   PHE   212 6144    5384    3335    -549   -1129 1 2 2 0
ATOM   1454 CB  PHE   212 17.358  10.219  64.388  1.000  45.35
ANISOU 1454 CB  PHE   212 6376    2569    8288    1348   3748 2314
ATOM   1455 N   THR   213 18.906  13.008  63.271  1.000  26.30
ANISOU 1455 N   THR   213 4134    2738    3122    662    -581 1 0 0
ATOM   1456 CA  THR   213 19.424  14.359  63.433  1.000  25.08
ANISOU 1456 CA  THR   213 3587    2852    3089    767    -810 - 3 2 3
ATOM   1457 C   THR   213 18.190  15.283  63.400  1.000  23.81
ANISOU 1457 C   THR   213 2835    2652    3560    215    -855 - 6 4 3
ATOM   1458 O   THR   213 17.329  15.137  62.517  1.000  21.40
ANISOU 1458 O   THR   213 2640    2269    3223    -328   -580 - 1 7 9
ATOM   1459 CB  THR   213 20.398  14.759  62.308  1.000  27.60
ANISOU 1459 CB  THR   213 3155    3220    4113    189    -356 - 7 9 8
ATOM   1460 OG1 THR   213 21.673  14.084  62.374  1.000  32.00
ANISOU 1460 OG1 THR   213 3582    4220    4356    746    -410 5 2 0
ATOM   1461 CG2 THR   213 20.735  16.254  62.355  1.000  29.45
ANISOU 1461 CG2 THR   213 4422    3320    3448    -106   -1265 - 2 0 4
ATOM   1462 N   ASP   214 18.119  16.177  64.371  1.000  21.05
ANISOU 1462 N   ASP   214 2790    2236    2972    -82    -380 - 1 4 2
ATOM   1463 CA  ASP   214 17.001  17.110  64.462  1.000  20.61
ANISOU 1463 CA  ASP   214 2742    2095    2993    -117   -898 - 3 7 9
ATOM   1464 C   ASP   214 16.994  18.030  63.226  1.000  20.58
ANISOU 1464 C   ASP   214 2373    2525    2923    182    -169 - 2 3 7
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ATOM    1465 O    ASP  214 18.018  18.430  62.678 1.000 23.02
ANISOU  1465 O    ASP  214 2461    2883    3404   -167  -52  -572
ATOM    1466 CB   ASP  214 17.205  18.058  65.637 1.000 23.54
ANISOU  1466 CB   ASP  214 3304    2607    3032   -92   -748 -668
ATOM    1467 CG   ASP  214 16.915  17.506  67.004 1.000 24.93
ANISOU  1467 CG   ASP  214 3545    2850    3079   450   -417 -614
ATOM    1468 OD1  ASP  214 16.357  16.395  67.113 1.000 29.17
ANISOU  1468 OD1  ASP  214 4134    3070    3878   202   -705 262
ATOM    1469 OD2  ASP  214 17.276  18.191  67.990 1.000 34.38
ANISOU  1469 OD2  ASP  214 6917    3040    3107   1017  -1413 -736
ATOM    1470 N    LEU  215 15.802  18.452  62.859 1.000 20.74
ANISOU  1470 N    LEU  215 2426    2372    3081   86    -60  306
ATOM    1471 CA   LEU  215 15.568  19.401  61.796 1.000 20.55
ANISOU  1471 CA   LEU  215 2895    2013    2899   -202  -176 141
ATOM    1472 C    LEU  215 14.724  20.552  62.332 1.000 19.02
ANISOU  1472 C    LEU  215 2482    2240    2504   -142  -34  321
ATOM    1473 O    LEU  215 13.510  20.613  62.142 1.000 22.39
ANISOU  1473 O    LEU  215 2635    2483    3389   -160  -475 573
ATOM    1474 CB   LEU  215 14.826  18.722  60.650 1.000 22.04
ANISOU  1474 CB   LEU  215 2778    2510    3086   -140  -261 -65
ATOM    1475 CG   LEU  215 15.598  17.502  60.128 1.000 25.25
ANISOU  1475 CG   LEU  215 3680    2829    3085   85    -166 -402
ATOM    1476 CD1  LEU  215 14.680  16.736  59.174 1.000 27.12
ANISOU  1476 CD1  LEU  215 4886    2934    2482   419   -1128 -65
ATOM    1477 CD2  LEU  215 16.881  18.046  59.510 1.000 30.76
ANISOU  1477 CD2  LEU  215 3434    3089    5165   1003  524  561
ATOM    1478 N    PRO  216 15.383  21.433  63.078 1.000 19.68
ANISOU  1478 N    PRO  216 2407    2191    2879   -157  148  103
ATOM    1479 CA   PRO  216 14.665  22.534  63.708 1.000 22.42
ANISOU  1479 CA   PRO  216 2869    2812    2836   272   10   -228
ATOM    1480 C    PRO  216 14.201  23.576  62.698 1.000 25.36
ANISOU  1480 C    PRO  216 4118    2433    3086   566   -131 -315
ATOM    1481 O    PRO  216 14.700  23.759  61.586 1.000 24.67
ANISOU  1481 O    PRO  216 3682    2406    3284   187   -176 -26
ATOM    1482 CB   PRO  216 15.693  23.092  64.676 1.000 23.88
ANISOU  1482 CB   PRO  216 3108    3049    2917   -216  116  -318
ATOM    1483 CG   PRO  216 17.033  22.701  64.146 1.000 28.31
ANISOU  1483 CG   PRO  216 2994    2996    4766   -88   -117 -1454
ATOM    1484 CD   PRO  216 16.807  21.405  63.436 1.000 24.55
ANISOU  1484 CD   PRO  216 2353    1777    5197   -436  -83  -348
ATOM    1485 N    TYR  217 13.154  24.287  63.102 1.000 24.13
ANISOU  1485 N    TYR  217 3237    2704    3229   244   -631 -511
ATOM    1486 CA   TYR  217 12.676  25.510  62.462 1.000 26.08
ANISOU  1486 CA   TYR  217 2514    2899    4498   104   -592 39
ATOM    1487 C    TYR  217 13.824  26.516  62.369 1.000 25.24
ANISOU  1487 C    TYR  217 3049    2948    3592   -257  -506 -538
ATOM    1488 O    TYR  217 14.570  26.675  63.340 1.000 31.78
ANISOU  1488 O    TYR  217 4114    2863    5096   -352  -2151 564
ATOM    1489 CB   TYR  217 11.559  26.103  63.315 1.000 25.97
ANISOU  1489 CB   TYR  217 2747    2773    4346   86    -615 -167
ATOM    1490 CG   TYR  217 11.189  27.543  63.125 1.000 31.64
ANISOU  1490 CG   TYR  217 3080    2803    6139   338   -1473 -644
ATOM    1491 CD1  TYR  217 10.430  27.928  62.022 1.000 27.85
ANISOU  1491 CD1  TYR  217 2238    3029    5314   511   -175 93
ATOM    1492 CD2  TYR  217 11.512  28.522  64.069 1.000 38.49
ANISOU  1492 CD2  TYR  217 4721    2813    7093   -686  -1682 -749
ATOM    1493 CE1  TYR  217 10.021  29.219  61.772 1.000 26.53
ANISOU  1493 CE1  TYR  217 1908    2675    5496   -41   107  69
ATOM    1494 CE2  TYR  217 11.113  29.835  63.827 1.000 42.90
ANISOU  1494 CE2  TYR  217 7112    2347    6842   -1415 -1949 -218
ATOM    1495 CZ   TYR  217 10.373  30.168  62.712 1.000 34.93
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ANISOU 1495 CZ   TYR   217 4042      2747      6483    -1462 -545 166
ATOM   1496 OH   TYR   217 9.996  31.486  62.473 1.000 36.41
ANISOU 1496 OH   TYR   217 5499      2895      5439     -753 -250 -289
ATOM   1497 N    ARG   218 14.022 27.110  61.218 1.000 25.58
ANISOU 1497 N    ARG   218 3461      2406      3852     -227 -533 -476
ATOM   1498 CA   ARG   218 14.923 28.243  61.049 1.000 29.26
ANISOU 1498 CA   ARG   218 3630      3270      4219     -784 -1349 268
ATOM   1499 C    ARG   218 14.113 29.336  60.366 1.000 24.81
ANISOU 1499 C    ARG   218 4063      2949      2415     -382 -228 -56
ATOM   1500 O    ARG   218 13.746 29.174  59.212 1.000 29.56
ANISOU 1500 O    ARG   218 6298      2267      2666     -890 -994 165
ATOM   1501 CB   ARG   218 16.162 27.823  60.256 1.000 35.90
ANISOU 1501 CB   ARG   218 3223      3685      6732     -624 -703 896
ATOM   1502 CG   ARG   218 17.369 28.665  60.661 1.000 51.38
ANISOU 1502 CG   ARG   218 4740      6768      8015    -3031 430 -183
ATOM   1503 CD   ARG   218 18.539 28.606  59.701 1.000 38.84
ANISOU 1503 CD   ARG   218 4968      6308      3482    -3596 -1165 1647
ATOM   1504 NE   ARG   218 19.343 27.395  59.905 1.000 45.09
ANISOU 1504 NE   ARG   218 4655      7495      4982    -2325 -962 -94
ATOM   1505 CZ   ARG   218 20.272 27.208  58.959 1.000 55.53
ANISOU 1505 CZ   ARG   218 5299     11458      4340    -2701 -1188 -1948
ATOM   1506 NH1  ARG   218 20.289 28.158  58.031 1.000 60.85
ANISOU 1506 NH1  ARG   218 2399     16648      4071    -1943 -1333 548
ATOM   1507 NH2  ARG   218 21.060 26.165  59.001 1.000 60.37
ANISOU 1507 NH2  ARG   218 8580     10111      4247    -2152 639 -4241
ATOM   1508 N    PRO   219 13.871 30.496  60.972 1.000 25.89
ANISOU 1508 N    PRO   219 2625      4126      3086       35 296 -1014
ATOM   1509 CA   PRO   219 13.065 31.548  60.326 1.000 28.10
ANISOU 1509 CA   PRO   219 2828      3120      4730     -410 379 -696
ATOM   1510 C    PRO   219 13.636 31.959  58.981 1.000 28.43
ANISOU 1510 C    PRO   219 3141      3010      4653     -190 116 -328
ATOM   1511 O    PRO   219 12.904 32.393  58.081 1.000 34.17
ANISOU 1511 O    PRO   219 4734      3500      4750      302 -798 -893
ATOM   1512 CB   PRO   219 13.115 32.717  61.316 1.000 39.70
ANISOU 1512 CB   PRO   219 5621      3612      5852     -500 1615 -1527
ATOM   1513 CG   PRO   219 13.368 32.033  62.628 1.000 42.38
ANISOU 1513 CG   PRO   219 6139      5277      4688     -257 2084 -2086
ATOM   1514 CD   PRO   219 14.370 30.943  62.289 1.000 32.77
ANISOU 1514 CD   PRO   219 3901      5719      2831     -602 828 -1603
ATOM   1515 N    ASP   220 14.950 31.824  58.811 1.000 25.65
ANISOU 1515 N    ASP   220 3328      1582      4837     -276 801 -878
ATOM   1516 CA   ASP   220 15.590 32.280  57.587 1.000 26.45
ANISOU 1516 CA   ASP   220 3594      2115      4341     -782 248 -861
ATOM   1517 C    ASP   220 15.781 31.305  56.451 1.000 28.46
ANISOU 1517 C    ASP   220 3549      1843      5423     -111 1638 -943
ATOM   1518 O    ASP   220 16.432 31.620  55.433 1.000 25.80
ANISOU 1518 O    ASP   220 3249      2021      4533     -140 623 -412
ATOM   1519 CB   ASP   220 16.911 32.962  57.998 1.000 33.76
ANISOU 1519 CB   ASP   220 2351      3539      6938     -445 1187 -1724
ATOM   1520 CG   ASP   220 17.882 31.913  58.502 1.000 42.36
ANISOU 1520 CG   ASP   220 2653      3531      9912     -812 230 -957
ATOM   1521 OD1  ASP   220 17.484 31.170  59.423 1.000 37.00
ANISOU 1521 OD1  ASP   220 3154      4148      6757     -104 -410 -2001
ATOM   1522 OD2  ASP   220 18.981 31.787  57.957 1.000 37.34
ANISOU 1522 OD2  ASP   220 2520      4700      6969       93 -824 -1266
ATOM   1523 N    ALA   221 15.292 30.072  56.537 1.000 24.79
ANISOU 1523 N    ALA   221 4148      1872      3398     -252 671 -659
ATOM   1524 CA   ALA   221 15.695 29.016  55.596 1.000 19.17
ANISOU 1524 CA   ALA   221 2165      1868      3251      -52 -92 -610
ATOM   1525 C    ALA   221 14.551 27.996  55.479 1.000 18.60
ANISOU 1525 C    ALA   221 1920      2238      2908      -82 -207 -362
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ATOM   1526 O   ALA 221 13.763 27.852 56.415 1.000 26.47
ANISOU 1526 O   ALA 221 4127   2641   3289  -1307  894  -9 0 4
ATOM   1527 CB  ALA 221 16.939 28.316 56.104 1.000 19.36
ANISOU 1527 CB  ALA 221 2054   2333   2969  -537  -316 6 6
ATOM   1528 N   VAL 222 14.490 27.385 54.313 1.000 17.35
ANISOU 1528 N   VAL 222 2089   1841   2661  -101  -323 -1 5 4
ATOM   1529 CA  VAL 222 13.556 26.276 54.083 1.000 17.45
ANISOU 1529 CA  VAL 222 1620   2004   3004  -66   -417 1 9
ATOM   1530 C   VAL 222 14.333 24.965 54.077 1.000 15.69
ANISOU 1530 C   VAL 222 1616   1876   2471  -269  -349 -3 2 4
ATOM   1531 O   VAL 222 15.512 24.934 53.716 1.000 17.84
ANISOU 1531 O   VAL 222 1658   1730   3390  -108  -194 4 8
ATOM   1532 CB  VAL 222 12.822 26.433 52.747 1.000 19.60
ANISOU 1532 CB  VAL 222 2267   2202   2979  91    -666 -3 0 4
ATOM   1533 CG1 VAL 222 13.781 26.363 51.563 1.000 21.96
ANISOU 1533 CG1 VAL 222 2252   3113   2977  250   -645 -1 8 2
ATOM   1534 CG2 VAL 222 11.730 25.411 52.490 1.000 22.44
ANISOU 1534 CG2 VAL 222 2923   2537   3067  -497  -898 4 4
ATOM   1535 N   LEU 223 13.789 23.892 54.621 1.000 16.30
ANISOU 1535 N   LEU 223 1792   1694   2706  -239  -93  -5 3 2
ATOM   1536 CA  LEU 223 14.407 22.575 54.579 1.000 15.91
ANISOU 1536 CA  LEU 223 1679   1864   2503  -93   -297 -3 3 3
ATOM   1537 C   LEU 223 14.114 21.908 53.243 1.000 14.86
ANISOU 1537 C   LEU 223 1337   1537   2773  -141  -322 -4 5 8
ATOM   1538 O   LEU 223 12.969 21.888 52.766 1.000 16.23
ANISOU 1538 O   LEU 223 1317   2132   2719  70    -391 -2 8 1
ATOM   1539 CB  LEU 223 13.829 21.779 55.761 1.000 19.97
ANISOU 1539 CB  LEU 223-2740   1945   2901  -121  205  -2 1 2
ATOM   1540 CG  LEU 223 14.298 20.348 55.882 1.000 23.01
ANISOU 1540 CG  LEU 223 2668   1871   4205  -375  -170 9 1
ATOM   1541 CD1 LEU 223 15.797 20.322 56.143 1.000 23.73
ANISOU 1541 CD1 LEU 223 2570   3067   3378  69   135  316
ATOM   1542 CD2 LEU 223 13.492 19.668 56.979 1.000 35.71
ANISOU 1542 CD2 LEU 223 2813   3296   7459  525   1116 2333
ATOM   1543 N   VAL 224 15.115 21.370 52.570 1.000 14.18
ANISOU 1543 N   VAL 224 1383   1446   2560  -28   -320 -2 0 5
ATOM   1544 CA  VAL 224 14.956 20.627 51.330 1.000 14.52
ANISOU 1544 CA  VAL 224 1585   1501   2431  -23   -323 -1 2 7
ATOM   1545 C   VAL 224 15.320 19.160 51.561 1.000 13.59
ANISOU 1545 C   VAL 224 1464   1522   2178  23   -290  -2 5 1
ATOM   1546 O   VAL 224 16.442 18.861 51.981 1.000 15.38
ANISOU 1546 O   VAL 224 1464   1558   2822  0    -505  -3 7 4
ATOM   1547 CB  VAL 224 15.832 21.209 50.222 1.000 14.25
ANISOU 1547 CB  VAL 224 1402   1606   2407  -60   -461 -1 0 8
ATOM   1548 CG1 VAL 224 15.685 20.443 48.906 1.000 16.63
ANISOU 1548 CG1 VAL 224 1682   2164   2474  -159  -408 -4 2 1
ATOM   1549 CG2 VAL 224 15.575 22.687 50.040 1.000 16.40
ANISOU 1549 CG2 VAL 224 1807   1562   2863  6    -509  8 7
ATOM   1550 N   PHE 225 14.340 18.299 51.299 1.000 13.49
ANISOU 1550 N   PHE 225 1494   1526   2106  -66   -353 -1 3 0
ATOM   1551 CA  PHE 225 14.647 16.882 51.162 1.000 14.67
ANISOU 1551 CA  PHE 225 1639   1505   2431  -115  -61  -2 8 3
ATOM   1552 C   PHE 225 14.756 16.533 49.675 1.000 14.27
ANISOU 1552 C   PHE 225 1536   1533   2352  100   -260 -1 9 4
ATOM   1553 O   PHE 225 13.858 16.876 48.893 1.000 16.25
ANISOU 1553 O   PHE 225 1604   2000   2569  296   -311 -8 8
ATOM   1554 CB  PHE 225 13.537 15.999 51.749 1.000 15.57
ANISOU 1554 CB  PHE 225 1613   1563   2740  -25   -46  2 4
ATOM   1555 CG  PHE 225 13.387 15.996 53.257 1.000 17.95
ANISOU 1555 CG  PHE 225 1888   2267   2666  -650  -302 203
ATOM   1556 CD1 PHE 225 14.409 15.809 54.157 1.000 27.39
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ANISOU 1556 CD1 PHE  225 2740      4234      3431   -910 -1094  9 0 0
ATOM   1557 CD2 PHE  225 12.125 15.863 53.820 1.000 21.09
ANISOU 1557 CD2 PHE  225 2333      2765      2917   -166  399  - 5 2 7
ATOM   1558 CE1 PHE  225 14.211 15.673 55.521 1.000 26.82
ANISOU 1558 CE1 PHE  225 3108      3657      3424  -1044 -1241  1 1 2 8
ATOM   1559 CE2 PHE  225 11.910 15.910 55.186 1.000 21.65
ANISOU 1559 CE2 PHE  225 2994      2414      2817    623  239  - 3 9
ATOM   1560 CZ  PHE  225 12.958 15.787 56.078 1.000 28.82
ANISOU 1560 CZ  PHE  225 3705      3716      3531   -832 -663 3 4 0
ATOM   1561 N   CYS  226 15.795 15.817 49.266 1.000 12.77
ANISOU 1561 N   CYS  226 1428      1292      2131    -60  -370 - 2 3 9
ATOM   1562 CA  CYS  226 15.810 15.180 47.956 1.000 12.99
ANISOU 1562 CA  CYS  226 1360      1440      2135     12  -355  - 2 0 7
ATOM   1563 C   CYS  226 14.903 13.956 47.985 1.000 12.37
ANISOU 1563 C   CYS  226 1533      1212      1955      8  -283  - 3 1 1
ATOM   1564 O   CYS  226 14.961 13.217 48.974 1.000 15.68
ANISOU 1564 O   CYS  226 1885      1651      2424   -140  -611 1 5 8
ATOM   1565 CB  CYS  226 17.228 14.855 47.527 1.000 13.77
ANISOU 1565 CB  CYS  226 1410      1627      2193     19 -203  - 7 5
ATOM   1566 SG  CYS  226 18.224 16.367 47.314 1.000 16.37
ANISOU 1566 SG  CYS  226 1744      1740      2735   -222  -236 - 1 2
ATOM   1567 N   GLY  227 14.150 13.722 46.928 1.000 13.20
ANISOU 1567 N   GLY  227 1388      1513      2113    -28  -293 - 2 9 0
ATOM   1568 CA  GLY  227 13.352 12.496 46.899 1.000 12.58
ANISOU 1568 CA  GLY  227 1279      1631      1872    -83  -438 - 2 5 5
ATOM   1569 C   GLY  227 13.903 11.541 45.849 1.000 12.54
ANISOU 1569 C   GLY  227 1518      1279      1965     15 -288  - 7 9
ATOM   1570 O   GLY  227 14.917 11.732 45.152 1.000 13.58
ANISOU 1570 O   GLY  227 1630      1523      2008     51 -155  8 2
ATOM   1571 N   ALA  228 13.212 10.400 45.712 1.000 13.02
ANISOU 1571 N   ALA  228 1490      1306      2151     59 -204   - 1 6 1
ATOM   1572 CA  ALA  228 13.663 9.321  44.860 1.000 12.41
ANISOU 1572 CA  ALA  228 1649      1155      1912    -68  -119 - 6 3
ATOM   1573 C   ALA  228 13.706 9.727  43.404 1.000 12.82
ANISOU 1573 C   ALA  228 1566      1288      2016     97 -223  - 5
ATOM   1574 O   ALA  228 14.482 9.132  42.651 1.000 13.64
ANISOU 1574 O   ALA  228 1717      1462      2004     26 -6 - 1 3 1
ATOM   1575 CB  ALA  228 12.714 8.121  45.058 1.000 14.56
ANISOU 1575 CB  ALA  228 1808      1366      2356   -219  358  - 2 4 3
ATOM   1576 N   ILE  229 12.909 10.695 42.952 1.000 13.61
ANISOU 1576 N   ILE  229 1340      1391      2441    -43  -289 2 7 3
ATOM   1577 CA  ILE  229 13.024 11.131 41.566 1.000 12.93
ANISOU 1577 CA  ILE  229 1325      1243      2344    -42  -306 1 7 3
ATOM   1578 C   ILE  229 14.342 11.864 41.358 1.000 13.17
ANISOU 1578 C   ILE  229 1327      1364      2311    -47  -191 1 3 0
ATOM   1579 O   ILE  229 14.938 11.746 40.262 1.000 14.41
ANISOU 1579 O   ILE  229 1587      1596      2293    -37  -167 1 8 3
ATOM   1580 CB  ILE  229 11.768 11.888 41.103 1.000 13.46
ANISOU 1580 CB  ILE  229 1470      1631      2015    171  -354 - 4 2
ATOM   1581 CG1 ILE  229 10.599 10.920 40.973 1.000 15.72
ANISOU 1581 CG1 ILE  229 1218      1936      2817     85 31 1 1 8
ATOM   1582 CG2 ILE  229 12.040 12.674 39.808 1.000 14.19
ANISOU 1582 CG2 ILE  229 1670      1425      2298     76 -364  1 7 4
ATOM   1583 CD1 ILE  229 10.745 9.924  39.836 1.000 20.03
ANISOU 1583 CD1 ILE  229 2129      1814      3667   -208  -385 - 4 8 8
ATOM   1584 N   ALA  230 14.877 12.575 42.353 1.000 13.38
ANISOU 1584 N   ALA  230 1252      1378      2454    -97  -176 7 4
ATOM   1585 CA  ALA  230 16.209 13.185 42.130 1.000 12.30
ANISOU 1585 CA  ALA  230 1156      1444      2074     66 -97 - 1 0 8
ATOM   1586 C   ALA  230 17.223 12.033 41.976 1.000 12.89
ANISOU 1586 C   ALA  230 1491      1327      2079    128   30 - 2 0
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ATOM    1587 O   ALA 230 18.100  12.091  41.146 1.000 13.65
ANISOU  1587 O   ALA 230 1240    1530    2418   108    4    6
ATOM    1588 CB  ALA 230 16.588  14.000  43.345 1.000 13.66
ANISOU  1588 CB  ALA 230 1559    1415    2215  -186  -21  -229
ATOM    1589 N   THR 231 17.143  10.978  42.805 1.000 13.31
ANISOU  1589 N   THR 231 1526    1318    2214   58  -261  - 1
ATOM    1590 CA  THR 231 18.022  9.815   42.659 1.000 13.32
ANISOU  1590 CA  THR 231 1660    1307    2093   78  -302   3  2
ATOM    1591 C   THR 231 17.906  9.224   41.251 1.000 13.27
ANISOU  1591 C   THR 231 1300    1631    2111   205  -211 3
ATOM    1592 O   THR 231 18.932  8.974   40.620 1.000 15.51
ANISOU  1592 O   THR 231 1468    1759    2667   245   58  -170
ATOM    1593 CB  THR 231 17.656  8.751   43.688 1.000 13.03
ANISOU  1593 CB  THR 231 1500    1302    2151   46  -166   1  2
ATOM    1594 OG1 THR 231 17.530  9.313   44.995 1.000 14.70
ANISOU  1594 OG1 THR 231 1742    1614    2230  -99   32  - 14
ATOM    1595 CG2 THR 231 18.698  7.621   43.697 1.000 13.69
ANISOU  1595 CG2 THR 231 1449    1419    2335   113  -211 1 9 7
ATOM    1596 N   LEU 232 16.665  9.049   40.796 1.000 13.43
ANISOU  1596 N   LEU 232 1447    1384    2271   75  -404  - 27
ATOM    1597 CA  LEU 232 16.446  8.396   39.527 1.000 14.11
ANISOU  1597 CA  LEU 232 1809    1226    2326   80  -468   4 9
ATOM    1598 C   LEU 232 16.975  9.248   38.381 1.000 15.53
ANISOU  1598 C   LEU 232 1968    1557    2376   209  -3 9 0
ATOM    1599 O   LEU 232 17.749  8.808   37.504 1.000 17.16
ANISOU  1599 O   LEU 232 2024    1949    2546   107  -116 - 519
ATOM    1600 CB  LEU 232 14.940  8.135   39.368 1.000 14.47
ANISOU  1600 CB  LEU 232 1692    1630    2175   72  -396  - 161
ATOM    1601 CG  LEU 232 14.525  7.307   38.155 1.000 15.89
ANISOU  1601 CG  LEU 232 1941    1768    2329   120  -470 - 3 0 3
ATOM    1602 CD1 LEU 232 15.118  5.920   38.202 1.000 23.19
ANISOU  1602 CD1 LEU 232 3565    2020    3228   743  -1110 - 8 5 1
ATOM    1603 CD2 LEU 232 13.003  7.190   38.126 1.000 19.46
ANISOU  1603 CD2 LEU 232 2006    2262    3126  -470  -523 - 66
ATOM    1604 N   VAL 233 16.539  10.514  38.299 1.000 13.73
ANISOU  1604 N   VAL 233 1736    1454    2025  -7  -263  193
ATOM    1605 CA  VAL 233 16.893  11.317  37.117 1.000 13.84
ANISOU  1605 CA  VAL 233 1674    1658    1926   141  -73  1 0 7
ATOM    1606 C   VAL 233 18.407  11.510  37.025 1.000 14.08
ANISOU  1606 C   VAL 233 1716    1674    1958   72  -46 113
ATOM    1607 O   VAL 233 18.940  11.587  35.910 1.000 16.65
ANISOU  1607 O   VAL 233 1923    2325    2079   38 109 4 0 1
ATOM    1608 CB  VAL 233 16.098  12.626  37.062 1.000 14.69
ANISOU  1608 CB  VAL 233 1680    1695    2206   141  -165 333
ATOM    1609 CG1 VAL 233 16.529  13.650  38.113 1.000 15.70
ANISOU  1609 CG1 VAL 233 1615    1654    2698   34 156 - 28
ATOM    1610 CG2 VAL 233 16.117  13.206  35.647 1.000 16.43
ANISOU  1610 CG2 VAL 233 1740    2041    2459   251   117  5 9 6
ATOM    1611 N   THR 234 19.100  11.594  38.175 1.000 14.23
ANISOU  1611 N   THR 234 1599    1724    2083   146  -110 235
ATOM    1612 CA  THR 234 20.524  11.908  38.148 1.000 16.14
ANISOU  1612 CA  THR 234 1664    1868    2602   63  -171  - 49
ATOM    1613 C   THR 234 21.346  10.621  38.006 1.000 17.09
ANISOU  1613 C   THR 234 1717    1865    2912   146   211  - 51
ATOM    1614 O   THR 234 22.558  10.644  38.139 1.000 17.25
ANISOU  1614 O   THR 234 1776    1951    2828   108   200  229
ATOM    1615 CB  THR 234 21.030  12.681  39.373 1.000 15.29
ANISOU  1615 CB  THR 234 1667    1502    2642  -46  -149 163
ATOM    1616 OG1 THR 234 20.849  11.819  40.522 1.000 15.45
ANISOU  1616 OG1 THR 234 1659    1708    2502  -80   59 4 4
ATOM    1617 CG2 THR 234 20.291  13.978  39.597 1.000 16.61
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ANISOU 1617 CG2 THR  234 1564      1672      3077     3  -34 - 4 2
ATOM   1618 N   GLY  235 20.712 9.441  37.833 1.000 15.80
ANISOU 1618 N   GLY  235 1905      1914      2564    193   29 -219
ATOM   1619 CA  GLY  235 21.484 8.209  37.792 1.000 17.10
ANISOU 1619 CA  GLY  235 2049      1861      2586    133   223  -488
ATOM   1620 C   GLY  235 22.225 7.931  39.083 1.000 18.06
ANISOU 1620 C   GLY  235 2046      2049      2768    419   499  3 0 3
ATOM   1621 O   GLY  235 23.285 7.289  39.010 1.000 21.26
ANISOU 1621 O   GLY  235 2167      2606      3303    679   343 - 7 4
ATOM   1622 N   GLY  236 21.602 8.149  40.237 1.000 15.17
ANISOU 1622 N   GLY  236 1663      1901      2582     36 291 3 0 5
ATOM   1623 CA  GLY  236 22.080 7.673  41.520 1.000 17.27
ANISOU 1623 CA  GLY  236 2135      1671      2754    225   28 229
ATOM   1624 C   GLY  236 23.033 8.639  42.194 1.000 16.88
ANISOU 1624 C   GLY  236 1880      1890      2644    204   100  2 2 2
ATOM   1625 O   GLY  236 23.692 8.272  43.193 1.000 19.42
ANISOU 1625 O   GLY  236 2165      2399      2814    314   -90  4 1 9
ATOM   1626 N   GLN  237 23.134 9.890  41.746 1.000 16.99
ANISOU 1626 N   GLN  237 1647      1851      2957    213  -213 1 6 7
ATOM   1627 CA  GLN  237 24.074 10.849 42.298 1.000 16.75
ANISOU 1627 CA  GLN  237 1608      2004      2752     72 177 9 8
ATOM   1628 C   GLN  237 23.481 11.604 43.483 1.000 15.64
ANISOU 1628 C   GLN  237 1404      2136      2402    231  -146 2 0 0
ATOM   1629 O   GLN  237 24.183 12.382 44.164 1.000 18.17
ANISOU 1629 O   GLN  237 1581      2508      2817   -227   -6 - 4 6
ATOM   1630 CB  GLN  237 24.456 11.855 41.217 1.000 17.17
ANISOU 1630 CB  GLN  237 1912      2080      2532     71 141 - 7
ATOM   1631 CG  GLN  237 25.304 11.221 40.115 1.000 17.64
ANISOU 1631 CG  GLN  237 1850      2410      2441    226   95 - 3 0
ATOM   1632 CD  GLN  237 25.721 12.302 39.137 1.000 19.72
ANISOU 1632 CD  GLN  237 1680      2833      2979    104   317 3 0 7
ATOM   1633 OE1 GLN  237 26.602 13.110 39.436 1.000 24.27
ANISOU 1633 OE1 GLN  237 1841      3145      4234   -213  -187 8 0 9
ATOM   1634 NE2 GLN  237 24.986 12.399 38.027 1.000 18.53
ANISOU 1634 NE2 GLN  237 2007      2298      2735    432   374  2 0 2
ATOM   1635 N   VAL  238 22.221 11.359 43.807 1.000 14.75
ANISOU 1635 N   VAL  238 1563      1804      2237    -32   -54  4 3
ATOM   1636 CA  VAL  238 21.533 12.075 44.862 1.000 14.41
ANISOU 1636 CA  VAL  238 1535      1553      2388      0  -44 3 2
ATOM   1637 C   VAL  238 20.861 11.060 45.781 1.000 13.56
ANISOU 1637 C   VAL  238 1414      1392      2346     82 55 -149
ATOM   1638 O   VAL  238 20.136 10.174 45.302 1.000 15.87
ANISOU 1638 O   VAL  238 1655      1639      2737   -218  -285 - 2 2
ATOM   1639 CB  VAL  238 20.467 13.061 44.309 1.000 14.73
ANISOU 1639 CB  VAL  238 1817      1626      2152     35 -437 - 9 5
ATOM   1640 CG1 VAL  238 19.805 13.764 45.489 1.000 15.70
ANISOU 1640 CG1 VAL  238 1965      1490      2510    174  -524 - 4 2 3
ATOM   1641 CG2 VAL  238 21.064 13.994 43.280 1.000 16.82
ANISOU 1641 CG2 VAL  238 1862      1718      2812    -60  -378 2 2 2
ATOM   1642 N   LYS  239 21.119 11.153 47.071 1.000 14.47
ANISOU 1642 N   LYS  239 1704      1474      2318     14 -40 1 2
ATOM   1643 CA  LYS  239 20.470 10.360 48.104 1.000 14.43
ANISOU 1643 CA  LYS  239 1460      1617      2406    106  -168 1 7 9
ATOM   1644 C   LYS  239 19.048 10.852 48.409 1.000 14.82
ANISOU 1644 C   LYS  239 1533      1456      2642    102   -53  2 3 2
ATOM   1645 O   LYS  239 18.839 12.067 48.457 1.000 14.74
ANISOU 1645 O   LYS  239 1841      1442      2318    158  -275 1 9 0
ATOM   1646 CB  LYS  239 21.320 10.435 49.385 1.000 16.40
ANISOU 1646 CB  LYS  239 1995      1712      2527    243  -543 2 5 2
ATOM   1647 CG  LYS  239 20.767 9.549  50.498 1.000 16.65
ANISOU 1647 CG  LYS  239 1954      1759      2614    -58  -781 2 4 4
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ATOM    1648 CD  LYS   239 21.738   9.511  51.683 1.000 19.76
ANISOU  1648 CD  LYS   239 2954     1820   2732   -123  -1234  3 6 3
ATOM    1649 CE  LYS   239 21.107   8.835  52.896 1.000 22.58
ANISOU  1649 CE  LYS   239 3331     2164   3086   -652  -1502  8 6 3
ATOM    1650 NZ  LYS   239 21.904   8.883  54.145 1.000 23.13
ANISOU  1650 NZ  LYS   239 2817     3360   2612   -471  -943 2 8 7
ATOM    1651 N   ALA   240 18.140   9.892  48.659 1.000 14.35
ANISOU  1651 N   ALA   240 1429     1607   2418   -156  -334 - 6 1
ATOM    1652 CA  ALA   240 16.791  10.192  49.145 1.000 13.98
ANISOU  1652 CA  ALA   240 1468     1635   2210   -151  -335 - 1 0
ATOM    1653 C   ALA   240 16.728   9.776  50.605 1.000 13.44
ANISOU  1653 C   ALA   240 1439     1388   2279    77 -450   2 2
ATOM    1654 O   ALA   240 16.514   8.592  50.913 1.000 16.32
ANISOU  1654 O   ALA   240 1932     1567   2699   -215  -673 3 1 4
ATOM    1655 CB  ALA   240 15.712   9.565  48.268 1.000 15.21
ANISOU  1655 CB  ALA   240 1510     1962   2306   -104  -387 - 3 0 7
ATOM    1656 N   PRO   241 16.907  10.701  51.546 1.000 14.23
ANISOU  1656 N   PRO   241 1634     1551   2221   -87   -292 7 1
ATOM    1657 CA  PRO   241 17.035  10.251  52.940 1.000 14.68
ANISOU  1657 CA  PRO   241 1718     1681   2180   -350  -174 - 3 0
ATOM    1658 C   PRO   241 15.693   9.961  53.579 1.000 13.89
ANISOU  1658 C   PRO   241 1659     1581   2039   -107  -207 - 7 4
ATOM    1659 O   PRO   241 14.629  10.527  53.261 1.000 17.06
ANISOU  1659 O   PRO   241 1698     1946   2838    17 -254   1 4 6
ATOM    1660 CB  PRO   241 17.689  11.462  53.619 1.000 16.63
ANISOU  1660 CB  PRO   241 2162     1657   2501   -460  -487 5 5
ATOM    1661 CG  PRO   241 17.138  12.651  52.826 1.000 16.56
ANISOU  1661 CG  PRO   241 2433     1601   2258   -367  -274 3 1
ATOM    1662 CD  PRO   241 17.164  12.140  51.409 1.000 14.92
ANISOU  1662 CD  PRO   241 1841     1490   2339   -215  -186 - 6 6
ATOM    1663 N   ARG   242 15.740   9.049  54.544 1.000 15.74
ANISOU  1663 N   ARG   242 1914     1853   2212   -381  -308 2 0 4
ATOM    1664 CA  ARG   242 14.574   8.772  55.376 1.000 15.50
ANISOU  1664 CA  ARG   242 1955     1863   2073   -236  -291 1 8 0
ATOM    1665 C   ARG   242 14.406   9.841  56.437 1.000 16.60
ANISOU  1665 C   ARG   242 1889     2011   2407   -120  -411 - 5 1
ATOM    1666 O   ARG   242 15.372  10.416  56.994 1.000 18.31
ANISOU  1666 O   ARG   242 2041     2186   2732   -216  -559 - 1 8 0
ATOM    1667 CB  ARG   242 14.728   7.419  56.085 1.000 18.38
ANISOU  1667 CB  ARG   242 2920     1810   2253   -486  -391 2 6 9
ATOM    1668 CG  ARG   242 14.564   6.273  55.094 1.000 18.42
ANISOU  1668 CG  ARG   242 2372     1873   2755   -88   162  - 1 5 5
ATOM    1669 CD  ARG   242 14.854   4.935  55.796 1.000 23.07
ANISOU  1669 CD  ARG   242 3380     2022   3366    470  -483 - 2 1 7
ATOM    1670 NE  ARG   242 16.334   4.954  55.991 1.000 26.69
ANISOU  1670 NE  ARG   242 3498     2727   3916    444  -829 4 7
ATOM    1671 CZ  ARG   242 16.941   3.921  56.584 1.000 27.19
ANISOU  1671 CZ  ARG   242 3166     2879   4284   -297  -1143  8 0 2
ATOM    1672 NH1 ARG   242 16.157   2.913  56.989 1.000 33.14
ANISOU  1672 NH1 ARG   242 3810     3235   5546   -316  528  7 2 6
ATOM    1673 NH2 ARG   242 18.241   3.889  56.779 1.000 31.13
ANISOU  1673 NH2 ARG   242 3043     2925   5859    227  -769 4 8 4
ATOM    1674 N   HIS   243 13.188  10.057  56.872 1.000 17.55
ANISOU  1674 N   HIS   243 1979     2233   2457   -165  -173 - 7 4
ATOM    1675 CA  HIS   243 12.913  11.050  57.914 1.000 17.84
ANISOU  1675 CA  HIS   243 2186     2139   2452   -260  -123 - 7 5
ATOM    1676 C   HIS   243 11.644  10.627  58.643 1.000 17.52
ANISOU  1676 C   HIS   243 2102     2084   2470   -248  -164 - 3 2 5
ATOM    1677 O   HIS   243 10.870   9.803  58.132 1.000 20.23
ANISOU  1677 O   HIS   243 2226     2593   2868   -551  -323 - 3 9 2
ATOM    1678 CB  HIS   243 12.865  12.456  57.324 1.000 19.74
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ANISOU  1678 CB   HIS  243 2770     2248     2482     -188  -106  8 3
ATOM    1679 CG   HIS  243 11.922   12.630   56.187  1.000 22.60
ANISOU  1679 CG   HIS  243 3449     2513     2624      164  -382 0
ATOM    1680 ND1  HIS  243 12.209   12.299   54.879  1.000 25.87
ANISOU  1680 ND1  HIS  243 4780     2575     2473     -609  -403 5 3
ATOM    1681 CD2  HIS  243 10.633   13.034   56.172  1.000 29.11
ANISOU  1681 CD2  HIS  243 3220     4490     3348      121  -421 16 3 0
ATOM    1682 CE1  HIS  243 11.182   12.573   54.109  1.000 32.92
ANISOU  1682 CE1  HIS  243 5835     3672     3001    -1102 -1367  6 8 9
ATOM    1683 NE2  HIS  243 10.214   13.012   54.875  1.000 36.95
ANISOU  1683 NE2  HIS  243 5719     4201     4119     1019 -2016  9 8 7
ATOM    1684 N    HIS  244 11.437   11.194   59.831  1.000 18.87
ANISOU  1684 N    HIS  244 2523     2477     2171      -88  -141 -1 17
ATOM    1685 CA   HIS  244 10.302   10.801   60.649  1.000 20.83
ANISOU  1685 CA   HIS  244 2802     2485     2628      171   251  2 7 2
ATOM    1686 C    HIS  244 9.927    11.968   61.551  1.000 20.33
ANISOU  1686 C    HIS  244 1803     2969     2953      -31   -78  -2 7 3
ATOM    1687 O    HIS  244 10.482   13.073   61.510  1.000 21.71
ANISOU  1687 O    HIS  244 2057     3418     2774     -535   145  -8 5 3
ATOM    1688 CB   HIS  244 10.714   9.557    61.468  1.000 24.38
ANISOU  1688 CB   HIS  244 4066     2644     2553      -76  -390 4 4 1
ATOM    1689 CG   HIS  244 11.859   9.725    62.423  1.000 28.34
ANISOU  1689 CG   HIS  244 4158     3498     3113      696  -727 - 8 9
ATOM    1690 ND1  HIS  244 13.132   9.205    62.268  1.000 32.35
ANISOU  1690 ND1  HIS  244 4012     4471     3808      548  -485 -8 5 0
ATOM    1691 CD2  HIS  244 11.928   10.391   63.609  1.000 25.21
ANISOU  1691 CD2  HIS  244 2937     4137     2505     -373    45 2 1 9
ATOM    1692 CE1  HIS  244 13.887   9.531    63.312  1.000 31.71
ANISOU  1692 CE1  HIS  244 4157     4277     3613     1224  -749 -5 1 8
ATOM    1693 NE2  HIS  244 13.146   10.263   64.150  1.000 24.52
ANISOU  1693 NE2  HIS  244 3165     3517     2633       94   -82 4 9 2
ATOM    1694 N    VAL  245 8.890    11.687   62.349  1.000 23.87
ANISOU  1694 N    VAL  245 2627     3119     3322     -251   531  - 3 1 0
ATOM    1695 CA   VAL  245 8.473    12.691   63.349  1.000 24.85
ANISOU  1695 CA   VAL  245 2785     3770     2888      481   149  - 2 9 3
ATOM    1696 C    VAL  245 8.624    12.079   64.735  1.000 26.03
ANISOU  1696 C    VAL  245 3220     3558     3112     -289   179  8 9
ATOM    1697 O    VAL  245 8.023    11.025   64.969  1.000 27.98
ANISOU  1697 O    VAL  245 3120     3085     4428       42   295  - 5 9
ATOM    1698 CB   VAL  245 7.020    13.114   63.099  1.000 26.02
ANISOU  1698 CB   VAL  245 2621     3489     3777       94  -103  - 5 6 9
ATOM    1699 CG1  VAL  245 6.586    14.114   64.161  1.000 28.06
ANISOU  1699 CG1  VAL  245 2717     3330     4614      159   746  - 4 8 5
ATOM    1700 CG2  VAL  245 6.927    13.705   61.680  1.000 30.51
ANISOU  1700 CG2  VAL  245 3564     3809     4220     1264  -305 - 3 3
ATOM    1701 N    ALA  246 9.399    12.696   65.603  1.000 28.08
ANISOU  1701 N    ALA  246 4338     3787     2543     -850   250  2 5 4
ATOM    1702 CA   ALA  246 9.567    12.316   67.003  1.000 27.45
ANISOU  1702 CA   ALA  246 4363     3360     2707      292   275  3 7 3
ATOM    1703 C    ALA  246 8.356    12.740   67.833  1.000 32.68
ANISOU  1703 C    ALA  246 4915     4473     3031       98 880 1 9 7
ATOM    1704 O    ALA  246 7.774    13.791   67.563  1.000 29.54
ANISOU  1704 O    ALA  246 3522     4283     3417     -224   875  - 3 2 9
ATOM    1705 CB   ALA  246 10.819   13.010   67.542  1.000 30.33
ANISOU  1705 CB   ALA  246 4564     3949     3011      615  -221 - 4 2 2
ATOM    1706 N    ALA  247 8.048    11.958   68.849  1.000 34.09
ANISOU  1706 N    ALA  247 4483     5156     3311    -1190   466  3 9 3
ATOM    1707 CA   ALA  247 7.036    12.190   69.859  1.000 34.23
ANISOU  1707 CA   ALA  247 4188     5627     3189    -1215   315  5 1 5
ATOM    1708 C    ALA  247 7.609    12.910   71.081  1.000 33.31
ANISOU  1708 C    ALA  247 5419     4684     2555      249  -506 1 1 4 7
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ATOM    1709 O    ALA  247 8.733   12.708   71.523 1.000 38.23
ANISOU  1709 O    ALA  247 5787    4478     4259   -378  -1519 1230
ATOM    1710 CB   ALA  247 6.383   10.881   70.314 1.000 47.11
ANISOU  1710 CB   ALA  247 8374    6726     2801   -2800 1464 686
ATOM    1711 N    PRO  248 6.817   13.851   71.577 1.000 42.28
ANISOU  1711 N    PRO  248 5771    5458     4836   -300  933  -97
ATOM    1712 CA   PRO  248 7.256   14.581   72.773 1.000 44.85
ANISOU  1712 CA   PRO  248 7568    5478     3996   -645  1413 214
ATOM    1713 C    PRO  248 7.161   13.618   73.948 1.000 49.25
ANISOU  1713 C    PRO  248 7978    5660     5075   -1446 552  985
ATOM    1714 O    PRO  248 6.251   12.794   74.014 1.000 45.48
ANISOU  1714 O    PRO  248 7651    5391     4237   -1127 2573 -796
ATOM    1715 CB   PRO  248 6.196   15.674   72.897 1.000 49.75
ANISOU  1715 CB   PRO  248 8563    4816     5523   -513  1238 -138
ATOM    1716 CG   PRO  248 4.973   15.053   72.299 1.000 50.89
ANISOU  1716 CG   PRO  248 7228    5564     6545   -108  2210 -1064
ATOM    1717 CD   PRO  248 5.489   14.272   71.114 1.000 44.69
ANISOU  1717 CD   PRO  248 6395    4579     6006   937   953  -577
ATOM    1718 N    ARG  249 8.109   13.683   74.883 1.000 48.76
ANISOU  1718 N    ARG  249 9141    6341     3045   -1317 1069 -477
ATOM    1719 CA   ARG  249 7.865   12.783   76.024 1.000 55.51
ANISOU  1719 CA   ARG  249 10023   6914     4156   -1098 895  566
ATOM    1720 C    ARG  249 6.844   13.466   76.916 1.000 46.09
ANISOU  1720 C    ARG  249 5561    8382     3568   -2484 -7   1237
ATOM    1721 O    ARG  249 6.244   12.915   77.831 1.000 56.25
ANISOU  1721 O    ARG  249 7572    6368     7433   -377  1799 3995
ATOM    1722 CB   ARG  249 9.177   12.459   76.721 1.000 55.24
ANISOU  1722 CB   ARG  249 8950    7715     4326   705   2864 1270
ATOM    1723 CG   ARG  249 9.915   11.278   76.110 1.000 71.04
ANISOU  1723 CG   ARG  249 12881   7330     6779   1135  3707 622
ATOM    1724 CD   ARG  249 10.403  10.303   77.165 1.000 72.89
ANISOU  1724 CD   ARG  249 11721   7991     7984   2171  2723 409
ATOM    1725 NE   ARG  249 11.124  9.162    76.580 1.000 70.73
ANISOU  1725 NE   ARG  249 8627    9977     8271   2362  2650 -266
ATOM    1726 CZ   ARG  249 12.039  8.493    77.282 1.000 72.71
ANISOU  1726 CZ   ARG  249 10269   9417     7942   2304  2153 133
ATOM    1727 NH1  ARG  249 12.297  8.893    78.521 1.000 89.50
ANISOU  1727 NH1  ARG  249 22286   6161     5559   2015  1622 3874
ATOM    1728 NH2  ARG  249 12.682  7.462    76.761 1.000 67.68
ANISOU  1728 NH2  ARG  249 5358    10062    10295  1004  3886 221
ATOM    1729 N    ALA  254 1.981   18.918   75.430 1.000 85.24
ANISOU  1729 N    ALA  254 15501   7922     8964   -4581 -1437 2347
ATOM    1730 CA   ALA  254 2.287   20.081   76.257 1.000 76.08
ANISOU  1730 CA   ALA  254 12510   8110     8286   -3993 1617 1592
ATOM    1731 C    ALA  254 2.943   21.216   75.489 1.000 60.91
ANISOU  1731 C    ALA  254 8383    5719     9040   -506  2886 1312
ATOM    1732 O    ALA  254 4.174   21.309   75.487 1.000 72.37
ANISOU  1732 O    ALA  254 8056    8109     11332  1602  4553 3381
ATOM    1733 CB   ALA  254 3.264   19.667   77.351 1.000 60.48
ANISOU  1733 CB   ALA  254 12589   7262     3131   -866  4570 -1112
ATOM    1734 N    GLY  255 2.200   22.108   74.846 1.000 54.40
ANISOU  1734 N    GLY  255 8029    5451     7190   594   2922 -940
ATOM    1735 CA   GLY  255 2.880   23.171   74.098 1.000 40.05
ANISOU  1735 CA   GLY  255 5181    4570     5465   1424  836  -921
ATOM    1736 C    GLY  255 3.640   22.565   72.921 1.000 38.82
ANISOU  1736 C    GLY  255 4227    4772     5749   557   702  -1561
ATOM    1737 O    GLY  255 4.580   23.163   72.398 1.000 39.96
ANISOU  1737 O    GLY  255 2978    6491     5715   -128  -136 -2226
ATOM    1738 N    SER  256 3.164   21.387   72.509 1.000 37.29
ANISOU  1738 N    SER  256 5047    4594     4527   389   11   -853
ATOM    1739 CA   SER  256 3.738   20.606   71.429 1.000 35.71
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ANISOU 1739 CA   SER  256 4737    4533    4299    560   -501 -919
ATOM   1740 C    SER  256 2.983  20.742  70.118  1.000 34.93
ANISOU 1740 C    SER  256 4584    4669    4019    -98   -85   9 1
ATOM   1741 O    SER  256 3.251  20.000  69.162  1.000 33.92
ANISOU 1741 O    SER  256 3575    6107    3207    503   304   3 7 7
ATOM   1742 CB   SER  256 3.845  19.136  71.853  1.000 30.17
ANISOU 1742 CB   SER  256 3125    4830    3509    624   212   -492
ATOM   1743 OG   SER  256 2.688  18.752  72.601  1.000 61.15
ANISOU 1743 OG   SER  256 2987    8497   11750    451   1943 2630
ATOM   1744 N    SER  257 2.065  21.700  70.030  1.000 35.54
ANISOU 1744 N    SER  257 4037    5989    3479    347   242   -86
ATOM   1745 CA   SER  257 1.379  21.993  68.767  1.000 30.95
ANISOU 1745 CA   SER  257 2824    5827    3109    170   672   -509
ATOM   1746 C    SER  257 2.378  22.538  67.760  1.000 30.63
ANISOU 1746 C    SER  257 3181    5524    2934   -476   765  -1297
ATOM   1747 O    SER  257 3.359  23.159  68.199  1.000 34.70
ANISOU 1747 O    SER  257 3500    6070    3616   -829   603  -1516
ATOM   1748 CB   SER  257 0.331  23.088  69.036  1.000 38.70
ANISOU 1748 CB   SER  257 3085    6518    5103    796   1381 4 35
ATOM   1749 OG   SER  257 0.801  24.361  68.601  1.000 65.12
ANISOU 1749 OG   SER  257 8002    5175   11565   -999  -3375  383
ATOM   1750 N    ARG  258 2.119  22.384  66.471  1.000 30.51
ANISOU 1750 N    ARG  258 3668    5068    2855   -332   677   -995
ATOM   1751 CA   ARG  258 2.997  22.819  65.396  1.000 28.15
ANISOU 1751 CA   ARG  258 3100    4620    2976   -106   358   -544
ATOM   1752 C    ARG  258 2.198  22.913  64.096  1.000 25.64
ANISOU 1752 C    ARG  258 3488    3381    2872   -676   273   -904
ATOM   1753 O    ARG  258 1.132  22.294  63.981  1.000 24.93
ANISOU 1753 O    ARG  258 3162    3240    3070   -441   478   -560
ATOM   1754 CB   ARG  258 4.175  21.873  65.154  1.000 27.21
ANISOU 1754 CB   ARG  258 3158    4041    3141   -446   313  -1352
ATOM   1755 CG   ARG  258 3.861  20.508  64.570  1.000 30.90
ANISOU 1755 CG   ARG  258 4782    3429    3531   -737   -738 -389
ATOM   1756 CD   ARG  258 5.039  19.537  64.769  1.000 36.65
ANISOU 1756 CD   ARG  258 5937    3466    4523    106   477   3 06
ATOM   1757 NE   ARG  258 4.597  18.176  64.411  1.000 32.42
ANISOU 1757 NE   ARG  258 3372    3858    5089   -85   -274 528
ATOM   1758 CZ   ARG  258 4.633  17.777  63.143  1.000 37.32
ANISOU 1758 CZ   ARG  258 5670    2958    5553    155   680   4 3
ATOM   1759 NH1  ARG  258 5.075  18.622  62.217  1.000 29.98
ANISOU 1759 NH1  ARG  258 3077    3435    4881   -150   -211 -103
ATOM   1760 NH2  ARG  258 4.210  16.566  62.824  1.000 38.66
ANISOU 1760 NH2  ARG  258 5812    3151    5724   -190  -1632 865
ATOM   1761 N    THR  259 2.806  23.572  63.120  1.000 23.62
ANISOU 1761 N    THR  259 2625    3578    2771   -519   315  -1037
ATOM   1762 CA   THR  259 2.337  23.482  61.730  1.000 21.97
ANISOU 1762 CA   THR  259 2614    2934    2800   -36    247  -1041
ATOM   1763 C    THR  259 3.528  23.197  60.808  1.000 19.76
ANISOU 1763 C    THR  259 2257    2663    2587   -38    21  -699
ATOM   1764 O    THR  259 4.698  23.411  61.159  1.000 21.13
ANISOU 1764 O    THR  259 2464    3096    2468   -495   -10  -286
ATOM   1765 CB   THR  259 1.682  24.793  61.278  1.000 24.04
ANISOU 1765 CB   THR  259 2125    3084    3927    70   -157  -1229
ATOM   1766 OG1  THR  259 2.697  25.790  61.041  1.000 23.14
ANISOU 1766 OG1  THR  259 2297    2848    3648    196   -142 -829
ATOM   1767 CG2  THR  259 0.760  25.408  62.331  1.000 25.17
ANISOU 1767 CG2  THR  259 2941    3229    3393    726   264   -136
ATOM   1768 N    SER  260 3.234  22.706  59.600  1.000 20.41
ANISOU 1768 N    SER  260 2386    2762    2609   -61    74  -806
ATOM   1769 CA   SER  260 4.225  22.515  58.551  1.000 19.33
ANISOU 1769 CA   SER  260 2488    2459    2399    192   8   -344
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ATOM    1770 C    SER  260 3.587   22.871 57.210 1.000 18.78
ANISOU  1770 C    SER  260 1996    2544   2595   -379  -264 -311
ATOM    1771 O    SER  260 2.375   22.758 56.988 1.000 21.20
ANISOU  1771 O    SER  260 1917    2448   3689   -75   -269 -573
ATOM    1772 CB   SER  260 4.738   21.076 58.480 1.000 20.28
ANISOU  1772 CB   SER  260 2491    2458   2755   160   -101 -495
ATOM    1773 OG   SER  260 3.656   20.197 58.227 1.000 22.70
ANISOU  1773 OG   SER  260 2758    2574   3294   -113  -234 -169
ATOM    1774 N    SER  261 4.474   23.329 56.330 1.000 18.79
ANISOU  1774 N    SER  261 2189    2215   2737   -55   -92  3 5
ATOM    1775 CA   SER  261 4.148   23.585 54.929 1.000 16.88
ANISOU  1775 CA   SER  261 2074    1718   2622   22    -117 -4 0 4
ATOM    1776 C    SER  261 5.066   22.672 54.106 1.000 17.25
ANISOU  1776 C    SER  261 1720    1833   3000   101   -350 -4 9 1
ATOM    1777 O    SER  261 6.272   22.876 54.173 1.000 19.96
ANISOU  1777 O    SER  261 1712    2417   3456   50    -483 -7 8 1
ATOM    1778 CB   SER  261 4.471   25.028 54.503 1.000 19.95
ANISOU  1778 CB   SER  261 2903    1675   3002   164   -113 -1 3 5
ATOM    1779 OG   SER  261 4.404   25.127 53.107 1.000 35.64
ANISOU  1779 OG   SER  261 5435    4814   3293   -1089 -766 1263
ATOM    1780 N    VAL  262 4.467   21.722 53.435 1.000 15.56
ANISOU  1780 N    VAL  262 1751    2021   2140   -75   -40  -4 3 6
ATOM    1781 CA   VAL  262 5.247   20.713 52.711 1.000 15.41
ANISOU  1781 CA   VAL  262 1871    1938   2048   43 21 -196
ATOM    1782 C    VAL  262 4.914   20.874 51.242 1.000 14.05
ANISOU  1782 C    VAL  262 1460    1784   2095   -13   29 -144
ATOM    1783 O    VAL  262 3.759   20.712 50.844 1.000 15.45
ANISOU  1783 O    VAL  262 1488    1900   2481   -175  -94  -191
ATOM    1784 CB   VAL  262 4.902   19.307 53.253 1.000 16.87
ANISOU  1784 CB   VAL  262 2144    2005   2260   165   -164 2 3
ATOM    1785 CG1  VAL  262 5.567   18.275 52.364 1.000 20.01
ANISOU  1785 CG1  VAL  262 2433    2006   3165   4    -191 -6 3 7
ATOM    1786 CG2  VAL  262 5.335   19.200 54.715 1.000 18.63
ANISOU  1786 CG2  VAL  262 2390    2242   2446   147   -397 1 7 5
ATOM    1787 N    PHE  263 5.894   21.163 50.412 1.000 13.73
ANISOU  1787 N    PHE  263 1497    1573.  2148   5    -64 186
ATOM    1788 CA   PHE  263 5.762   21.411 48.994 1.000 13.04
ANISOU  1788 CA   PHE  263 1654    1196   2105   -12   -193 1 13
ATOM    1789 C    PHE  263 6.479   20.253 48.284 1.000 13.56
ANISOU  1789 C    PHE  263 1432    1351   2370   -175  -98  -8 7
ATOM    1790 O    PHE  263 7.732   20.177 48.281 1.000 13.83
ANISOU  1790 O    PHE  263 1415    1437   2403   -82   -299 -1 0 4
ATOM    1791 CB   PHE  263 6.364   22.770 48.594 1.000 13.50
ANISOU  1791 CB   PHE  263 1658    1374   2098   -295  -97  3 4
ATOM    1792 CG   PHE  263 6.062   23.148 47.135 1.000 13.34
ANISOU  1792 CG   PHE  263 1616    1358   2096   -159  -111 8 2
ATOM    1793 CD1  PHE  263 6.750   22.635 46.051 1.000 14.95
ANISOU  1793 CD1  PHE  263 1977    1547   2156   -354  -131 -3 8 4
ATOM    1794 CD2  PHE  263 5.005   24.048 46.883 1.000 15.37
ANISOU  1794 CD2  PHE  263 1549    1557   2735   -139  -264 3 0 3
ATOM    1795 CE1  PHE  263 6.468   22.945 44.720 1.000 14.58
ANISOU  1795 CE1  PHE  263 1721    1621   2196   -242  71 -1 4 4
ATOM    1796 CE2  PHE  263 4.703   24.366 45.566 1.000 14.71
ANISOU  1796 CE2  PHE  263 1482    1428   2680   -20   -261 1 3 7
ATOM    1797 CZ   PHE  263 5.383   23.809 44.479 1.000 16.55
ANISOU  1797 CZ   PHE  263 1935    1492   2862   -152  29 1 4
ATOM    1798 N    PHE  264 5.721   19.405 47.588 1.000 12.07
ANISOU  1798 N    PHE  264 1277    1343   1967   -66   -49  1 9
ATOM    1799 CA   PHE  264 6.267   18.328 46.769 1.000 11.90
ANISOU  1799 CA   PHE  264 1177    1289   2058   -129  34 -2 1
ATOM    1800 C    PHE  264 6.440   18.775 45.314 1.000 11.76
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ANISOU 1800 C   PHE 264 1206   1258   2004  -121  -42   8
ATOM   1801 O   PHE 264 5.418  19.097 44.683 1.000 12.55
ANISOU 1801 O   PHE 264 1165   1473   2133  -77   -120  4 6
ATOM   1802 CB  PHE 264 5.346  17.099 46.773 1.000 12.39
ANISOU 1802 CB  PHE 264 1101   1498   2110  -304  -42   6 3
ATOM   1803 CG  PHE 264 5.022  16.558 48.150 1.000 13.97
ANISOU 1803 CG  PHE 264 1647   1465   2197  -290  13  12 1
ATOM   1804 CD1 PHE 264 5.960  15.848 48.852 1.000 17.07
ANISOU 1804 CD1 PHE 264 2039   1976   2471  -422  -410 4 97
ATOM   1805 CD2 PHE 264 3.747  16.679 48.668 1.000 17.41
ANISOU 1805 CD2 PHE 264 1835   2359   2419  -440  433  1 12
ATOM   1806 CE1 PHE 264 5.661  15.247 50.053 1.000 20.59
ANISOU 1806 CE1 PHE 264 2616   2710   2496  -556  -425 7 25
ATOM   1807 CE2 PHE 264 3.458  16.133 49.906 1.000 22.51
ANISOU 1807 CE2 PHE 264 2151   4047   2355  -787  106  5 53
ATOM   1808 CZ  PHE 264 4.386  15.350 50.562 1.000 20.88
ANISOU 1808 CZ  PHE 264 2889   2376   2669  -936  -22  3 06
ATOM   1809 N   LEU 265 7.676  18.756 44.811 1.000 11.81
ANISOU 1809 N   LEU 265 1192   1248   2047  -37   47  1 9
ATOM   1810 CA  LEU 265 7.900  19.000 43.374 1.000 12.01
ANISOU 1810 CA  LEU 265 1264   1269   2028  -223  16  - 63
ATOM   1811 C   LEU 265 7.915  17.617 42.703 1.000 12.10
ANISOU 1811 C   LEU 265 1266   1298   2033  -117  -81   3
ATOM   1812 O   LEU 265 8.842  16.834 42.915 1.000 12.93
ANISOU 1812 O   LEU 265 1367   1283   2260  -107  -152 4 4
ATOM   1813 CB  LEU 265 9.246  19.730 43.156 1.000 12.59
ANISOU 1813 CB  LEU 265 1399   1364   2019  -257  57  - 9
ATOM   1814 CG  LEU 265 9.500  20.124 41.709 1.000 12.19
ANISOU 1814 CG  LEU 265 1168   1399   2066  -292  -248 3 02
ATOM   1815 CD1 LEU 265 8.620  21.314 41.318 1.000 13.29
ANISOU 1815 CD1 LEU 265 1518   1546   1984  84 36  1 9
ATOM   1816 CD2 LEU 265 10.971 20.458 41.449 1.000 13.14
ANISOU 1816 CD2 LEU 265 1204   1593   2197  -234  41  - 20
ATOM   1817 N   ARG 266 6.842  17.249 41.996 1.000 12.06
ANISOU 1817 N   ARG 266 1412   1127   2043  -220  -190 4 5
ATOM   1818 CA  ARG 266 6.586  15.913 41.488 1.000 12.07
ANISOU 1818 CA  ARG 266 1372   1201   2012  -258  0   8 0
ATOM   1819 C   ARG 266 6.619  15.965 39.972 1.000 11.75
ANISOU 1819 C   ARG 266 1203   1315   1948  29 -267  1 42
ATOM   1820 O   ARG 266 6.032  16.860 39.396 1.000 13.06
ANISOU 1820 O   ARG 266 1430   1318   2214  5  -173  2 81
ATOM   1821 CB  ARG 266 5.243  15.370 41.994 1.000 12.95
ANISOU 1821 CB  ARG 266 1142   1477   2302  -189  43  - 33
ATOM   1822 CG  ARG 266 5.036  15.606 43.488 1.000 13.80
ANISOU 1822 CG  ARG 266 1351   1686   2207  -159  66  - 115
ATOM   1823 CD  ARG 266 3.723  15.041 43.993 1.000 12.70
ANISOU 1823 CD  ARG 266 1369   1362   2094  66 -22 8 4
ATOM   1824 NE  ARG 266 2.581  15.648 43.281 1.000 12.97
ANISOU 1824 NE  ARG 266 1343   1155   2428  52 -165  -137
ATOM   1825 CZ  ARG 266 1.304  15.281 43.500 1.000 11.34
ANISOU 1825 CZ  ARG 266 1432   1009   1869  45 -149  -103
ATOM   1826 NH1 ARG 266 0.995  14.414 44.476 1.000 13.39
ANISOU 1826 NH1 ARG 266 1802   1165   2119  -11  -38  7 2
ATOM   1827 NH2 ARG 266 0.305  15.821 42.826 1.000 12.55
ANISOU 1827 NH2 ARG 266 1490   1067   2210  125  -357 -159
ATOM   1828 N   PRO 267 7.237  14.951 39.357 1.000 12.74
ANISOU 1828 N   PRO 267 1418   1394   2030  16 -146  108
ATOM   1829 CA  PRO 267 7.298  14.947 37.887 1.000 13.88
ANISOU 1829 CA  PRO 267 1442   1786   2047  167  -125 - 84
ATOM   1830 C   PRO 267 5.957  14.722 37.222 1.000 12.61
ANISOU 1830 C   PRO 267 1413   1508   1868  -6 44 2 7
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ATOM    1831 O    PRO  267 4.998   14.155   37.772 1.000 13.60
ANISOU  1831 O    PRO  267 1648    1355     2164   -160  118   9  3
ATOM    1832 CB   PRO  267 8.238   13.761   37.599 1.000 15.30
ANISOU  1832 CB   PRO  267 1435    1740     2637   115   -28  -169
ATOM    1833 CG   PRO  267 8.033   12.846   38.764 1.000 15.82
ANISOU  1833 CG   PRO  267 1885    1804     2324   381   -270 -197
ATOM    1834 CD   PRO  267 7.872   13.746   39.965 1.000 14.73
ANISOU  1834 CD   PRO  267 1803    1356     2438   311   -666 -205
ATOM    1835 N    ASN  268 5.933   15.051   35.939 1.000 13.27
ANISOU  1835 N    ASN  268 1601    1665     1777   -126  -43  -127
ATOM    1836 CA   ASN  268 4.800   14.709   35.073 1.000 13.72
ANISOU  1836 CA   ASN  268 1793    1401     2018   -214  -236 -71
ATOM    1837 C    ASN  268 4.723   13.192   34.875 1.000 13.14
ANISOU  1837 C    ASN  268 1485    1350     2156   -213  104   5  4
ATOM    1838 O    ASN  268 5.702   12.467   34.934 1.000 13.90
ANISOU  1838 O    ASN  268 1698    1416     2167   -91   123  - 36
ATOM    1839 CB   ASN  268 4.997   15.338   33.690 1.000 15.74
ANISOU  1839 CB   ASN  268 2597    1369     2016   -66   -437 135
ATOM    1840 CG   ASN  268 5.011   16.862   33.811 1.000 15.41
ANISOU  1840 CG   ASN  268 2255    1439     2162   -17   -184 4  7
ATOM    1841 OD1  ASN  268 4.069   17.454   34.352 1.000 17.75
ANISOU  1841 OD1  ASN  268 2573    1686     2487   42 91 - 98
ATOM    1842 ND2  ASN  268 6.066   17.503   33.319 1.000 16.61
ANISOU  1842 ND2  ASN  268 2408    1355     2546   -50   -57  14 2
ATOM    1843 N    ALA  269 3.531   12.712   34.594 1.000 13.99
ANISOU  1843 N    ALA  269 1677    1467     2172   -356  -65  17 0
ATOM    1844 CA   ALA  269 3.278   11.286   34.353 1.000 13.42
ANISOU  1844 CA   ALA  269 1459    1405     2234   -208  -118 107
ATOM    1845 C    ALA  269 4.182   10.729   33.252 1.000 13.93
ANISOU  1845 C    ALA  269 1289    1538     2466   -168  -5  153
ATOM    1846 O    ALA  269 4.581   9.550    33.318 1.000 14.97
ANISOU  1846 O    ALA  269 1718    1476     2494   -143  112  8  6
ATOM    1847 CB   ALA  269 1.806   11.051   34.008 1.000 13.76
ANISOU  1847 CB   ALA  269 1300    1474     2454   -60   -61  12 3
ATOM    1848 N    ASP  270 4.482   11.541   32.251 1.000 14.38
ANISOU  1848 N    ASP  270 1688    1476     2300   -151  30 - 5
ATOM    1849 CA   ASP  270 5.247   11.079   31.098 1.000 14.83
ANISOU  1849 CA   ASP  270 1747    1693     2194   -99   -42  6  8
ATOM    1850 C    ASP  270 6.749   11.287   31.227 1.000 15.68
ANISOU  1850 C    ASP  270 1714    1886     2357   -224  143  8  6
ATOM    1851 O    ASP  270 7.483   11.008   30.255 1.000 17.12
ANISOU  1851 O    ASP  270 1952    2354     2200   -80   139  2 26
ATOM    1852 CB   ASP  270 4.718   11.681   29.800 1.000 17.67
ANISOU  1852 CB   ASP  270 2461    1966     2288   -75   -319 126
ATOM    1853 CG   ASP  270 4.968   13.168   29.649 1.000 18.22
ANISOU  1853 CG   ASP  270 2284    2024     2613   -88   -80  4 74
ATOM    1854 OD1  ASP  270 5.386   13.826   30.607 1.000 20.55
ANISOU  1854 OD1  ASP  270 3424    1541     2844   -47   -287 4 25
ATOM    1855 OD2  ASP  270 4.646   13.698   28.552 1.000 23.06
ANISOU  1855 OD2  ASP  270 3317    2727     2719   -49   -136 8 12
ATOM    1856 N    PHE  271 7.221   11.668   32.413 1.000 13.93
ANISOU  1856 N    PHE  271 1556    1318     2417   97 31 4 1
ATOM    1857 CA   PHE  271 8.671   11.723   32.644 1.000 14.41
ANISOU  1857 CA   PHE  271 1624    1430     2423   110   29 263
ATOM    1858 C    PHE  271 9.275   10.349   32.325 1.000 13.31
ANISOU  1858 C    PHE  271 1402    1430     2225   -30   28 218
ATOM    1859 O    PHE  271 8.790   9.340    32.870 1.000 14.91
ANISOU  1859 O    PHE  271 1900    1374     2392   -26   240  19 2
ATOM    1860 CB   PHE  271 8.942   12.146   34.098 1.000 15.57
ANISOU  1860 CB   PHE  271 1700    1721     2495   -66   -36  9
ATOM    1861 CG   PHE  271 10.386  11.791   34.516 1.000 14.56
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ANISOU 1861 CG  PHE 271 1729    1320    2485  -152   34 -124
ATOM   1862 CD1 PHE 271 11.460  12.369  33.814 1.000 17.76
ANISOU 1862 CD1 PHE 271 1714    1581    3452  -235  393  -249
ATOM   1863 CD2 PHE 271 10.698  10.972  35.570 1.000 18.04
ANISOU 1863 CD2 PHE 271 2182    1543    3130   -95 -540 172
ATOM   1864 CE1 PHE 271 12.786  12.092  34.166 1.000 17.54
ANISOU 1864 CE1 PHE 271 1838    1700    3128  -291  114  -50
ATOM   1865 CE2 PHE 271 11.997  10.609  35.899 1.000 18.84
ANISOU 1865 CE2 PHE 271 1935    1646    3578  -392 -396 425
ATOM   1866 CZ  PHE 271 13.039  11.154  35.162 1.000 17.25
ANISOU 1866 CZ  PHE 271 2444    1697    2415  -486  -19 -394
ATOM   1867 N   THR 272 10.278  10.298  31.453 1.000 13.78
ANISOU 1867 N   THR 272 1514    1641    2083    30   19 154
ATOM   1868 CA  THR 272 10.811  9.046   30.938 1.000 13.99
ANISOU 1868 CA  THR 272 1551    1660    2105   -99   83 67
ATOM   1869 C   THR 272 12.246  8.841   31.410 1.000 14.71
ANISOU 1869 C   THR 272 1598    1549    2441    -3  108 357
ATOM   1870 O   THR 272 13.046  9.808   31.424 1.000 16.23
ANISOU 1870 O   THR 272 1646    1742    2780  -246    5  185
ATOM   1871 CB  THR 272 10.751  9.117   29.388 1.000 16.27
ANISOU 1871 CB  THR 272 1856    2205    2119   191  125 8
ATOM   1872 OG1 THR 272 9.341   9.221   29.032 1.000 17.99
ANISOU 1872 OG1 THR 272 1996    2473    2368    64 -190 264
ATOM   1873 CG2 THR 272 11.249  7.856   28.723 1.000 17.94
ANISOU 1873 CG2 THR 272 2423    2167    2227   173  177  -94
ATOM   1874 N   PHE 273 12.567  7.600   31.743 1.000 14.91
ANISOU 1874 N   PHE 273 1644    1521    2499    92 238 218
ATOM   1875 CA  PHE 273 13.894  7.253   32.254 1.000 15.16
ANISOU 1875 CA  PHE 273 1602    1813    2345   296  277 5 5
ATOM   1876 C   PHE 273 14.350  5.899   31.724 1.000 14.69
ANISOU 1876 C   PHE 273 1408    1647    2528    24 479 178
ATOM   1877 O   PHE 273 13.541  5.086   31.262 1.000 15.91
ANISOU 1877 O   PHE 273 1738    1767    2541  -115  450 119
ATOM   1878 CB  PHE 273 13.899  7.301   33.769 1.000 15.77
ANISOU 1878 CB  PHE 273 1758    1921    2314  -344  286 1 2 3
ATOM   1879 CG  PHE 273 12.931  6.336   34.424 1.000 14.54
ANISOU 1879 CG  PHE 273 1390    1726    2410   -95  -11 1 9 5
ATOM   1880 CD1 PHE 273 11.601  6.743   34.655 1.000 16.64
ANISOU 1880 CD1 PHE 273 1457    2343    2521   -24  308 3 6 2
ATOM   1881 CD2 PHE 273 13.295  5.038   34.721 1.000 15.23
ANISOU 1881 CD2 PHE 273 1863    1624    2300  -110   91 136
ATOM   1882 CE1 PHE 273 10.719  5.848   35.259 1.000 16.10
ANISOU 1882 CE1 PHE 273 1593    2158    2365  -162  292 1 2 2
ATOM   1883 CE2 PHE 273 12.419  4.148   35.354 1.000 16.01
ANISOU 1883 CE2 PHE 273 1904    1980    2198  -139  285 1 8 1
ATOM   1884 CZ  PHE 273 11.109  4.559   35.548 1.000 15.18
ANISOU 1884 CZ  PHE 273 1843    2001    1925  -141   73 -227
ATOM   1885 N   SER 274 15.634  5.612   31.926 1.000 15.31
ANISOU 1885 N   SER 274 1559    1940    2317   361  383 2 4 7
ATOM   1886 CA  SER 274 16.221  4.318   31.518 1.000 15.37
ANISOU 1886 CA  SER 274 1476    1723    2642    32 557 156
ATOM   1887 C   SER 274 15.953  3.284   32.588 1.000 14.67
ANISOU 1887 C   SER 274 973 1877    2726  -113  265 3 0 2
ATOM   1888 O   SER 274 16.310  3.476   33.770 1.000 15.98
ANISOU 1888 O   SER 274 1668    1677    2728   126  143 1 9 3
ATOM   1889 CB  SER 274 17.742  4.556   31.356 1.000 17.41
ANISOU 1889 CB  SER 274 1487    2019    3112   235  945 7 2 5
ATOM   1890 OG  SER 274 18.362  3.280   31.334 1.000 18.03
ANISOU 1890 OG  SER 274 1839    1961    3052   293  840 1 8 8
ATOM   1891 N   VAL 275 15.395  2.133   32.182 1.000 15.58
ANISOU 1891 N   VAL 275 1646    1857    2417  -182  461 2 6 1
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ATOM    1892 CA   VAL   275 15.158   1.033    33.137 1.000 15.65
ANISOU  1892 CA   VAL   275 1681    1800     2466   -180  261  265
ATOM    1893 C    VAL   275 16.454   0.445    33.659 1.000 15.33
ANISOU  1893 C    VAL   275 1805    1881     2139   116   392  -45
ATOM    1894 O    VAL   275 16.623   0.280    34.871 1.000 15.68
ANISOU  1894 O    VAL   275 2037    1655     2267   6     297  196
ATOM    1895 CB   VAL   275 14.227  -0.004    32.483 1.000 16.05
ANISOU  1895 CB   VAL   275 1635    1708     2755   -76   405  21
ATOM    1896 CG1  VAL   275 14.080  -1.186    33.426 1.000 17.04
ANISOU  1896 CG1  VAL   275 2045    1688     2740   -211  230  15
ATOM    1897 CG2  VAL   275 12.847   0.608    32.203 1.000 18.45
ANISOU  1897 CG2  VAL   275 1650    2432     2928   -57   135  269
ATOM    1898 N    PRO   276 17.437   0.093    32.844 1.000 16.21
ANISOU  1898 N    PRO   276 1927    1700     2532   97   589  36
ATOM    1899 CA   PRO   276 18.707  -0.434    33.399 1.000 18.10
ANISOU  1899 CA   PRO   276 1736    2115     3025   147   616  -93
ATOM    1900 C    PRO   276 19.382   0.541    34.321 1.000 17.52
ANISOU  1900 C    PRO   276 1998    1961     2697   97   469  239
ATOM    1901 O    PRO   276 19.963   0.171    35.348 1.000 19.66
ANISOU  1901 O    PRO   276 2015    2409     3047   24   280  468
ATOM    1902 CB   PRO   276 19.590  -0.796    32.214 1.000 20.80
ANISOU  1902 CB   PRO   276 2094    2687     3121   306  771  -249
ATOM    1903 CG   PRO   276 18.852  -0.390    30.999 1.000 21.57
ANISOU  1903 CG   PRO   276 2051    3098     3046   340  802  -288
ATOM    1904 CD   PRO   276 17.446  -0.021    31.368 1.000 18.17
ANISOU  1904 CD   PRO   276 2053    2306     2546   179  832  -318
ATOM    1905 N    LEU   277 19.325   1.845    34.027 1.000 17.09
ANISOU  1905 N    LEU   277 1571    1898     3025   230  511  107
ATOM    1906 CA   LEU   277 19.962   2.802    34.940 1.000 19.34
ANISOU  1906 CA   LEU   277 2035    2141     3171   -219  218  262
ATOM    1907 C    LEU   277 19.214   2.858    36.249 1.000 18.34
ANISOU  1907 C    LEU   277 1963    1958     3049   -33   -3   -38
ATOM    1908 O    LEU   277 19.815   2.957    37.319 1.000 19.29
ANISOU  1908 O    LEU   277 2466    1710     3154   -271  -188  -2
ATOM    1909 CB   LEU   277 20.094   4.178    34.291 1.000 21.41
ANISOU  1909 CB   LEU   277 2739    2011     3383   14   12   287
ATOM    1910 CG   LEU   277 20.910   5.192    35.111 1.000 26.34
ANISOU  1910 CG   LEU   277 3662    2367     3978   -980  -547  944
ATOM    1911 CD1  LEU   277 22.396   4.839    35.069 1.000 38.04
ANISOU  1911 CD1  LEU   277 3764    3171     7518   -487  -2057  853
ATOM    1912 CD2  LEU   277 20.708   6.607    34.631 1.000 31.98
ANISOU  1912 CD2  LEU   277 4023    2018     6109   -366  508  732
ATOM    1913 N    ALA   278 17.875   2.711    36.202 1.000 17.30
ANISOU  1913 N    ALA   278 2015    1766     2793   74   218  115
ATOM    1914 CA   ALA   278 17.124   2.712    37.464 1.000 16.75
ANISOU  1914 CA   ALA   278 2200    1566     2600   216  146  -2
ATOM    1915 C    ALA   278 17.575   1.523    38.313 1.000 16.31
ANISOU  1915 C    ALA   278 1849    1553     2794   -337  -196  107
ATOM    1916 O    ALA   278 17.718   1.635    39.523 1.000 17.26
ANISOU  1916 O    ALA   278 1963    1839     2754   -62   -53  205
ATOM    1917 CB   ALA   278 15.642   2.622    37.177 1.000 17.55
ANISOU  1917 CB   ALA   278 2109    1880     2679   295  195  -11
ATOM    1918 N    ARG   279 17.724   0.362    37.696 1.000 17.07
ANISOU  1918 N    ARG   279 2322    1399     2766   -178  26   308
ATOM    1919 CA   ARG   279 18.099  -0.829    38.473 1.000 16.93
ANISOU  1919 CA   ARG   279 2377    1734     2323   15   -241  203
ATOM    1920 C    ARG   279 19.477  -0.587    39.098 1.000 19.87
ANISOU  1920 C    ARG   279 2491    2292     2766   -487  -384  543
ATOM    1921 O    ARG   279 19.687  -0.974    40.234 1.000 33.04
ANISOU  1921 O    ARG   279 3615    4823     4115   -1726 -1700 2603
ATOM    1922 CB   ARG   279 18.164  -2.042    37.517 1.000 20.04
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ANISOU 1922 CB  ARG 279 2042    1609    3964    108   -221 -305
ATOM   1923 CG  ARG 279 16.742  -2.491  37.179 1.000 20.73
ANISOU 1923 CG  ARG 279 2152    2728    2997    -98   -401 -351
ATOM   1924 CD  ARG 279 16.601  -3.422  35.990 1.000 24.81
ANISOU 1924 CD  ARG 279 3213    2982    3231    -1    -507 -609
ATOM   1925 NE  ARG 279 17.575  -4.484  36.195 1.000 27.50
ANISOU 1925 NE  ARG 279 4331    2656    3463    355   -146 -181
ATOM   1926 CZ  ARG 279 17.301  -5.725  36.620 1.000 41.33
ANISOU 1926 CZ  ARG 279 7720    2466    5519    -186  -454 -142
ATOM   1927 NH1 ARG 279 16.024  -6.012  36.866 1.000 40.58
ANISOU 1927 NH1 ARG 279 8821    3012    3585    -1564 507  452
ATOM   1928 NH2 ARG 279 18.200  -6.688  36.807 1.000 53.27
ANISOU 1928 NH2 ARG 279 9516    2227    8496    -127  -4607 -463
ATOM   1929 N   GLU 280 20.390  0.119   38.424 1.000 19.68
ANISOU 1929 N   GLU 280 2172    2276    3028    84 324 136
ATOM   1930 CA  GLU 280 21.748  0.334   38.948 1.000 20.28
ANISOU 1930 CA  GLU 280 2046    2274    3385    25 581 115
ATOM   1931 C   GLU 280 21.705  1.257   40.182 1.000 20.67
ANISOU 1931 C   GLU 280 2334    1968    3552    -281  285  2 0
ATOM   1932 O   GLU 280 22.723  1.079   40.908 1.000 26.81
ANISOU 1932 O   GLU 280 2659    3419    4107    -37   -183 -8 7
ATOM   1933 CB  GLU 280 22.651  1.029   37.926 1.000 24.69
ANISOU 1933 CB  GLU 280 2778    2558    4044    -351  1022 303
ATOM   1934 CG  GLU 280 22.997  0.342   36.634 1.000 27.13
ANISOU 1934 CG  GLU 280 2605    4888    2816    596   116  6 23
ATOM   1935 CD  GLU 280 23.815  1.298   35.760 1.000 43.10
ANISOU 1935 CD  GLU 280 4693    7780    3903    -1328 1206 834
ATOM   1936 OE1 GLU 280 24.541  2.171   36.296 1.000 41.36
ANISOU 1936 OE1 GLU 280 2666    6033    7015    27 1099  690
ATOM   1937 OE2 GLU 280 23.727  1.219   34.520 1.000 64.81
ANISOU 1937 OE2 GLU 280 10844   10028   3751    -2356 1104 2134
ATOM   1938 N   CYS 281 20.777  2.156   40.313 1.000 21.61
ANISOU 1938 N   CYS 281 2372    2240    3599    -211  532  -238
ATOM   1939 CA  CYS 281 20.481  3.164   41.337 1.000 24.33
ANISOU 1939 CA  CYS 281 2114    2911    4219    -526  1121 -817
ATOM   1940 C   CYS 281 19.858  2.568   42.585 1.000 27.11
ANISOU 1940 C   CYS 281 2492    3261    4546    -1608 1457 -1343
ATOM   1941 O   CYS 281 19.789  3.161   43.685 1.000 19.19
ANISOU 1941 O   CYS 281 1997    2012    3282    -250  -326 135
ATOM   1942 CB  CYS 281 19.632  4.438   40.795 1.000 22.02
ANISOU 1942 CB  CYS 281 1214    3088    4063    -286  100  -2108
ATOM   1943 SG  CYS 281 20.639  5.092   39.444 1.000 53.41
ANISOU 1943 SG  CYS 281 10822   4742    4730    -3261 1316 4 5
ATOM   1944 N   GLY 282 19.370  1.317   42.565 1.000 18.81
ANISOU 1944 N   GLY 282 1230    2224    3695    3  -149  -206
ATOM   1945 CA  GLY 282 18.675  0.750   43.744 1.000 17.07
ANISOU 1945 CA  GLY 282 1544    1771    3171    31 -552  -168
ATOM   1946 C   GLY 282 17.194  0.496   43.538 1.000 14.91
ANISOU 1946 C   GLY 282 1601    1645    2417    -135  -453 378
ATOM   1947 O   GLY 282 16.480  -0.062  44.380 1.000 16.38
ANISOU 1947 O   GLY 282 1998    1921    2306    -211  -399 360
ATOM   1948 N   PHE 283 16.625  0.919   42.404 1.000 13.44
ANISOU 1948 N   PHE 283 1563    1539    2006    -189  -336 -115
ATOM   1949 CA  PHE 283 15.173  0.829   42.203 1.000 14.52
ANISOU 1949 CA  PHE 283 1677    1410    2428    -187  -670 4 6
ATOM   1950 C   PHE 283 14.810  -0.604  41.809 1.000 13.08
ANISOU 1950 C   PHE 283 1519    1314    2137    -121  -338 174
ATOM   1951 O   PHE 283 15.311  -1.184  40.837 1.000 14.11
ANISOU 1951 O   PHE 283 1366    1418    2578    -142  -78  1 7
ATOM   1952 CB  PHE 283 14.749  1.800   41.078 1.000 13.76
ANISOU 1952 CB  PHE 283 1814    1288    2125    -39   -268 0
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ATOM   1953 CG  PHE  283 14.842  3.269  41.512 1.000 14.75
ANISOU 1953 CG  PHE  283 1985    1363   2255   12 -317  - 3
ATOM   1954 CD1 PHE  283 13.814  3.904  42.142 1.000 21.50
ANISOU 1954 CD1 PHE  283 2318    1759   4091   303  -23  - 626
ATOM   1955 CD2 PHE  283 15.994  3.999  41.298 1.000 17.72
ANISOU 1955 CD2 PHE  283 2526    1244   2963   -307 -89  2 72
ATOM   1956 CE1 PHE  283 13.909  5.177  42.655 1.000 20.78
ANISOU 1956 CE1 PHE  283 2056    1802   4036   92 66  - 647
ATOM   1957 CE2 PHE  283 16.115  5.290  41.814 1.000 15.06
ANISOU 1957 CE2 PHE  283 2101    1257   2364   -5 -255  377
ATOM   1958 CZ  PHE  283 15.084  5.891  42.506 1.000 18.04
ANISOU 1958 CZ  PHE  283 1881    1995   2979   192  -432 2 0
ATOM   1959 N   ASP  284 13.883  -1.178 42.579 1.000 13.07
ANISOU 1959 N   ASP  284 1549    1366   2049   -73  -331 1 17
ATOM   1960 CA  ASP  284 13.502  -2.584 42.395 1.000 12.80
ANISOU 1960 CA  ASP  284 1481    1460   1924   -231 -207 1 57
ATOM   1961 C   ASP  284 12.335  -2.654 41.421 1.000 12.88
ANISOU 1961 C   ASP  284 1493    1508   1891   -19  -180 - 55
ATOM   1962 O   ASP  284 11.231  -3.147 41.741 1.000 13.69
ANISOU 1962 O   ASP  284 1407    1351   2442   -93  -281 9 2
ATOM   1963 CB  ASP  284 13.141  -3.203 43.744 1.000 14.10
ANISOU 1963 CB  ASP  284 1966    1534   1858   -40  -11  1 45
ATOM   1964 CG  ASP  284 13.165  -4.730 43.717 1.000 14.49
ANISOU 1964 CG  ASP  284 1906    1520   2079   47 -424  2 90
ATOM   1965 OD1 ASP  284 13.732  -5.305 42.758 1.000 14.81
ANISOU 1965 OD1 ASP  284 2036    1343   2250   -152 -166 2 31
ATOM   1966 OD2 ASP  284 12.652  -5.310 44.696 1.000 15.32
ANISOU 1966 OD2 ASP  284 1979    1557   2286   -79  -109 1 53
ATOM   1967 N   VAL  285 12.644  -2.191 40.217 1.000 12.40
ANISOU 1967 N   VAL  285 1582    1260   1870   79 -185  - 131
ATOM   1968 CA  VAL  285 11.599  -2.064 39.216 1.000 12.31
ANISOU 1968 CA  VAL  285 1442    1469   1767   -161 -59  - 1
ATOM   1969 C   VAL  285 11.229  -3.419 38.589 1.000 12.09
ANISOU 1969 C   VAL  285 1220    1407   1967   -1 -100  - 79
ATOM   1970 O   VAL  285 12.085  -4.311 38.433 1.000 13.68
ANISOU 1970 O   VAL  285 1237    1514   2446   67 56 4 0
ATOM   1971 CB  VAL  285 12.009  -1.066 38.098 1.000 14.68
ANISOU 1971 CB  VAL  285 1943    1621   2014   -163 -50  2 59
ATOM   1972 CG1 VAL  285 12.131  0.332  38.672 1.000 17.08
ANISOU 1972 CG1 VAL  285 2429    1402   2658   18 -465  4 25
ATOM   1973 CG2 VAL  285 13.309  -1.499 37.433 1.000 15.69
ANISOU 1973 CG2 VAL  285 2131    2180   1649   -316 161  3 06
ATOM   1974 N   SER  286 9.952   -3.541 38.241 1.000 12.24
ANISOU 1974 N   SER  286 1263    1440   1946   -12  -148 - 117
ATOM   1975 CA  SER  286 9.398   -4.669 37.495 1.000 12.84
ANISOU 1975 CA  SER  286 1571    1463   1845   -356 -30  1 4
ATOM   1976 C   SER  286 8.861   -4.118 36.172 1.000 11.99
ANISOU 1976 C   SER  286 1516    1374   1666   -28  60 -198
ATOM   1977 O   SER  286 7.654   -4.110 35.917 1.000 15.68
ANISOU 1977 O   SER  286 1514    2384   2059   2 18  - 20
ATOM   1978 CB  SER  286 8.301   -5.327 38.300 1.000 12.54
ANISOU 1978 CB  SER  286 1407    1442   1915   -59  170  - 55
ATOM   1979 OG  SER  286 7.415   -4.380 38.890 1.000 13.15
ANISOU 1979 OG  SER  286 1531    1430   2034   105  -73  - 59
ATOM   1980 N   LEU  287 9.769   -3.649 35.333 1.000 13.56
ANISOU 1980 N   LEU  287 1574    1521   2058   41 133 177
ATOM   1981 CA  LEU  287 9.451   -2.932 34.101 1.000 13.48
ANISOU 1981 CA  LEU  287 1812    1418   1891   -84  116  1 7
ATOM   1982 C   LEU  287 10.075  -3.654 32.908 1.000 15.12
ANISOU 1982 C   LEU  287 1945    1714   2086   32 233 - 31
ATOM   1983 O   LEU  287 11.277  -3.883 32.927 1.000 17.91
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ANISOU 1983 O   LEU 287 1885     2275    2645   109   300  -275
ATOM   1984 CB  LEU 287 9.954   -1.480  34.118 1.000 14.37
ANISOU 1984 CB  LEU 287 1773     1380    2306   -34   248  107
ATOM   1985 CG  LEU 287 9.362   -0.603  35.231 1.000 14.32
ANISOU 1985 CG  LEU 287 1421     1496    2523    62  52 -158
ATOM   1986 CD1 LEU 287 10.143  0.705   35.413 1.000 14.53
ANISOU 1986 CD1 LEU 287 1672     1444    2403     0 -146  143
ATOM   1987 CD2 LEU 287 7.921   -0.197  34.820 1.000 16.03
ANISOU 1987 CD2 LEU 287 1476     2035    2579   166  -100  -7
ATOM   1988 N   ASP 288 9.256   -4.060  31.958 1.000 15.09
ANISOU 1988 N   ASP 288 2041     1611    2081    73 175 -216
ATOM   1989 CA  ASP 288 9.764   -4.722  30.757 1.000 16.55
ANISOU 1989 CA  ASP 288 1992     2028    2268    29 335 -314
ATOM   1990 C   ASP 288 10.437  -3.682  29.874 1.000 18.74
ANISOU 1990 C   ASP 288 2484     2597    2040  -231  97 81
ATOM   1991 O   ASP 288 9.998   -2.526  29.849 1.000 25.48
ANISOU 1991 O   ASP 288 3382     2433    3865  -322 639 346
ATOM   1992 CB  ASP 288 8.659   -5.490  30.060 1.000 19.23
ANISOU 1992 CB  ASP 288 2431     2414    2460  -209 258 -720
ATOM   1993 CG  ASP 288 9.139   -6.468  29.000 1.000 19.50
ANISOU 1993 CG  ASP 288 2688     2223    2499   -49 393 -552
ATOM   1994 OD1 ASP 288 10.173  -7.145  29.185 1.000 27.03
ANISOU 1994 OD1 ASP 288 3134     3038    4100   624 427 -716
ATOM   1995 OD2 ASP 288 8.458   -6.566  27.955 1.000 31.00
ANISOU 1995 OD2 ASP 288 3596     4859    3325   307 -361 -2100
ATOM   1996 N   GLY 289 11.489  -4.035  29.137 1.000 22.68
ANISOU 1996 N   GLY 289 2960     2893    2765  -531 778 116
ATOM   1997 CA  GLY 289 12.008  -3.083  28.169 1.000 25.60
ANISOU 1997 CA  GLY 289 3678     3562    2486 -1469 558 1 1
ATOM   1998 C   GLY 289 12.988  -2.078  28.725 1.000 21.08
ANISOU 1998 C   GLY 289 2567     2916    2528  -485 353 150
ATOM   1999 O   GLY 289 13.411  -2.097  29.891 1.000 23.72
ANISOU 1999 O   GLY 289 3428     3219    2364 -1104 440 113
ATOM   2000 N   GLU 290 13.402  -1.168  27.818 1.000 18.32
ANISOU 2000 N   GLU 290 2246     2396    2319  -145 616 -115
ATOM   2001 CA  GLU 290 14.538  -0.301  28.074 1.000 17.75
ANISOU 2001 CA  GLU 290 1912     2419    2412    97 770 -367
ATOM   2002 C   GLU 290 14.261  1.058   28.696 1.000 17.90
ANISOU 2002 C   GLU 290 2180     2308    2313    50 711 -297
ATOM   2003 O   GLU 290 15.143  1.619   29.353 1.000 17.58
ANISOU 2003 O   GLU 290 2525     2050    2104   -35 380 165
ATOM   2004 CB  GLU 290 15.341  -0.161  26.785 1.000 23.21
ANISOU 2004 CB  GLU 290 3184     2508    3126  -273 1753 -467
ATOM   2005 CG  GLU 290 15.833  -1.492  26.226 1.000 24.55
ANISOU 2005 CG  GLU 290 3609     2992    2725   348 1232 -743
ATOM   2006 CD  GLU 290 16.676  -2.280  27.221 1.000 30.03
ANISOU 2006 CD  GLU 290 3365     3708    4337   476 753 -211
ATOM   2007 OE1 GLU 290 17.492  -1.684  27.947 1.000 40.04
ANISOU 2007 OE1 GLU 290 5043     6674    3498   525  36 -1226
ATOM   2008 OE2 GLU 290 16.622  -3.527  27.237 1.000 51.76
ANISOU 2008 OE2 GLU 290 8785     3812    7070   -12 -483 1583
ATOM   2009 N   THR 291 13.064  1.578   28.486 1.000 18.14
ANISOU 2009 N   THR 291 2305     2486    2103   224 711 -321
ATOM   2010 CA  THR 291 12.697  2.896   29.049 1.000 18.72
ANISOU 2010 CA  THR 291 2521     2080    2511   105 1131 6 6
ATOM   2011 C   THR 291 11.278  2.744   29.593 1.000 15.79
ANISOU 2011 C   THR 291 2178     1758    2064   134 538  -50
ATOM   2012 O   THR 291 10.517  1.834   29.217 1.000 18.62
ANISOU 2012 O   THR 291 2764     1966    2344  -248 664 -311
ATOM   2013 CB  THR 291 12.722  4.031   28.044 1.000 21.54
ANISOU 2013 CB  THR 291 3043     2625    2516  -164 891 362
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ATOM    2014 OG1 THR  291 11.695   3.862  27.077 1.000 25.98
ANISOU  2014 OG1 THR  291 3160    4072    2641   -86   703   5 0 3
ATOM    2015 CG2 THR  291 14.048   4.115  27.292 1.000 24.20
ANISOU  2015 CG2 THR  291 3199    3832    2164   -445  930   5 3 3
ATOM    2016 N   ALA  292 10.959   3.658  30.492 1.000 14.84
ANISOU  2016 N   ALA  292 1637    1656    2347    200  429  - 1 5 3
ATOM    2017 CA  ALA  292 9.675    3.657  31.179 1.000 13.84
ANISOU  2017 CA  ALA  292 1488    1477    2294    170  299   7 8
ATOM    2018 C   ALA  292 9.356    5.065  31.619 1.000 12.65
ANISOU  2018 C   ALA  292 1334    1564    1908     60  144 - 1 3 9
ATOM    2019 O   ALA  292 10.228   5.939  31.710 1.000 14.27
ANISOU  2019 O   ALA  292 1529    1596    2295    -35   109   1 1 6
ATOM    2020 CB  ALA  292 9.670    2.754  32.414 1.000 14.02
ANISOU  2020 CB  ALA  292 1693    1580    2053     37  22  - 2 7
ATOM    2021 N   THR  293 8.054    5.258  31.916 1.000 13.54
ANISOU  2021 N   THR  293 1468    1617    2058    117   373  - 1 1 8
ATOM    2022 CA  THR  293 7.605    6.546  32.424 1.000 13.40
ANISOU  2022 CA  THR  293 1565    1647    1877    152   209  - 2 3 2
ATOM    2023 C   THR  293 7.407    6.482  33.952 1.000 12.09
ANISOU  2023 C   THR  293 1345    1322    1927    -62   326  - 1 2
ATOM    2024 O   THR  293 7.214    5.441  34.555 1.000 12.93
ANISOU  2024 O   THR  293 1385    1356    2170   -190   194   9 0
ATOM    2025 CB  THR  293 6.295    7.058  31.788 1.000 13.45
ANISOU  2025 CB  THR  293 1598    1579    1935     95  345 3 4 5
ATOM    2026 OG1 THR  293 5.273    6.112  32.117 1.000 13.75
ANISOU  2026 OG1 THR  293 1672    1570    1981    -12   314   1 3 5
ATOM    2027 CG2 THR  293 6.476    7.139  30.272 1.000 15.93
ANISOU  2027 CG2 THR  293 2121    2022    1911    255   434   3 3 7
ATOM    2028 N   PHE  294 7.241    7.661  34.544 1.000 12.81
ANISOU  2028 N   PHE  294 1607    1440    1822    -83   149  - 1 5 1
ATOM    2029 CA  PHE  294 6.857    7.773  35.935 1.000 12.37
ANISOU  2029 CA  PHE  294 1332    1469    1899   -267   166  - 2 8 9
ATOM    2030 C   PHE  294 5.556    7.022  36.184 1.000 12.36
ANISOU  2030 C   PHE  294 1336    1361    1999   -151   30  - 3 6
ATOM    2031 O   PHE  294 5.403    6.253  37.143 1.000 13.27
ANISOU  2031 O   PHE  294 1556    1410    2076   -191   183   4 6
ATOM    2032 CB  PHE  294 6.698    9.271  36.267 1.000 13.83
ANISOU  2032 CB  PHE  294 2039    1351    1866   -192   -29  - 1 7 7
ATOM    2033 CG  PHE  294 6.306    9.488  37.711 1.000 13.10
ANISOU  2033 CG  PHE  294 1786    1216    1974   -125   -63  - 2 4 4
ATOM    2034 CD1 PHE  294 7.207    9.411  38.749 1.000 17.41
ANISOU  2034 CD1 PHE  294 2132    2533    1952  -1012  -287 7 6
ATOM    2035 CD2 PHE  294 4.964    9.739  38.026 1.000 18.41
ANISOU  2035 CD2 PHE  294 2156    2263    2575    565   332   5 7
ATOM    2036 CE1 PHE  294 6.810    9.608  40.054 1.000 17.72
ANISOU  2036 CE1 PHE  294 2348    2296    2086   -308  -362 - 1 3 6
ATOM    2037 CE2 PHE  294 4.591   10.010  39.324 1.000 19.37
ANISOU  2037 CE2 PHE  294 2078    2541    2740    330   232  - 6 3 0
ATOM    2038 CZ  PHE  294 5.507    9.956  40.355 1.000 18.36
ANISOU  2038 CZ  PHE  294 2443    1678    2855   -394   -55  - 2 4 5
ATOM    2039 N   GLN  295 4.588    7.205  35.246 1.000 12.59
ANISOU  2039 N   GLN  295 1248    1429    2106    -62    38  - 1 6 8
ATOM    2040 CA  GLN  295 3.320    6.484  35.408 1.000 12.76
ANISOU  2040 CA  GLN  295 1266    1215    2365      7  -157  - 1 1 7
ATOM    2041 C   GLN  295 3.512    4.984  35.318 1.000 12.24
ANISOU  2041 C   GLN  295 1449    1256    1944     10 1  - 7 3
ATOM    2042 O   GLN  295 2.922    4.238  36.101 1.000 13.61
ANISOU  2042 O   GLN  295 1323    1427    2424      7  85 1 5 5
ATOM    2043 CB  GLN  295 2.375    6.975  34.317 1.000 14.31
ANISOU  2043 CB  GLN  295 1227    1594    2616     81  -133   1 9 2
ATOM    2044 CG  GLN  295 1.062    6.256  34.249 1.000 14.03
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ANISOU 2044 CG  GLN  295 1391   1509   2430  -59  -300  4 7
ATOM   2045 CD  GLN  295 0.157  6.687  33.115 1.000 13.56
ANISOU 2045 CD  GLN  295 1305   1486   2361  133  -117 1 6 5
ATOM   2046 OE1 GLN  295 0.459  7.693  32.419 1.000 15.35
ANISOU 2046 OE1 GLN  295 1811   1651   2371  161  206   2 2 0
ATOM   2047 NE2 GLN  295 -0.982 6.026  32.943 1.000 15.04
ANISOU 2047 NE2 GLN  295 1225   1995   2493  75  -139  - 9 9
ATOM   2048 N   ASP  296 4.363  4.463  34.423 1.000 12.66
ANISOU 2048 N   ASP  296 1425   1396   1990  181  -112 -1 1 0
ATOM   2049 CA  ASP  296 4.653  3.016  34.439 1.000 12.26
ANISOU 2049 CA  ASP  296 1628   1274   1755  53  -51 -1 5 1
ATOM   2050 C   ASP  296 5.167  2.569  35.792 1.000 11.57
ANISOU 2050 C   ASP  296 1199   1300   1895  -82   30  - 2 2
ATOM   2051 O   ASP  296 4.854  1.460  36.224 1.000 13.08
ANISOU 2051 O   ASP  296 1534   1368   2070  -107  38 1 3 9
ATOM   2052 CB  ASP  296 5.709  2.634  33.399 1.000 14.18
ANISOU 2052 CB  ASP  296 1870   1700   1819  141   30 -3 7 8
ATOM   2053 CG  ASP  296 5.295  2.848  31.952 1.000 13.32
ANISOU 2053 CG  ASP  296 1655   1557   1848  -58   67 2
ATOM   2054 OD1 ASP  296 4.110  2.725  31.601 1.000 15.83
ANISOU 2054 OD1 ASP  296 1680   1935   2402  -68  -126 -1 8 9
ATOM   2055 OD2 ASP  296 6.212  3.098  31.114 1.000 15.27
ANISOU 2055 OD2 ASP  296 1757   1937   2106  -229  137  1 7 7
ATOM   2056 N   TRP  297 6.038  3.352  36.416 1.000 12.26
ANISOU 2056 N   TRP  297 1325   1403   1931  -34  -123 -1 1 8
ATOM   2057 CA  TRP  297 6.683  2.960  37.656 1.000 12.82
ANISOU 2057 CA  TRP  297 1328   1599   1943  -104  -49  1 5 1
ATOM   2058 C   TRP  297 5.746  3.007  38.858 1.000 13.13
ANISOU 2058 C   TRP  297 1418   1580   1992  24  -23 1 8 5
ATOM   2059 O   TRP  297 5.565  2.030  39.584 1.000 14.03
ANISOU 2059 O   TRP  297 1554   1619   2159  102   137  3 2 0
ATOM   2060 CB  TRP  297 7.908  3.847  37.928 1.000 13.68
ANISOU 2060 CB  TRP  297 1130   1692   2376  -19  -169 1 5 1
ATOM   2061 CG  TRP  297 8.646  3.455  39.166 1.000 13.28
ANISOU 2061 CG  TRP  297 1143   1646   2255  91  -96 2 2
ATOM   2062 CD1 TRP  297 8.932  2.179  39.622 1.000 15.58
ANISOU 2062 CD1 TRP  297 1615   1689   2618  275  -544 - 7 7
ATOM   2063 CD2 TRP  297 9.144  4.353  40.189 1.000 14.69
ANISOU 2063 CD2 TRP  297 1327   1693   2562  -117  -219 5
ATOM   2064 NE1 TRP  297 9.583  2.265  40.840 1.000 15.34
ANISOU 2064 NE1 TRP  297 1378   1853   2598  70 -494  7 5
ATOM   2065 CE2 TRP  297 9.724  3.597  41.203 1.000 16.13
ANISOU 2065 CE2 TRP  297 1241   2009   2880  182  -676 -1 9 6
ATOM   2066 CE3 TRP  297 9.094  5.756  40.284 1.000 22.13
ANISOU 2066 CE3 TRP  297 3040   1658   3712  -665  -1408  1 2 9
ATOM   2067 CZ2 TRP  297 10.318 4.180  42.316 1.000 18.45
ANISOU 2067 CZ2 TRP  297 2204   2387   2418  44 -326  - 3 3 1
ATOM   2068 CZ3 TRP  297 9.670  6.353  41.399 1.000 21.55
ANISOU 2068 CZ3 TRP  297 2916   2104   3167  -55  -752 -4 5 8
ATOM   2069 CH2 TRP  297 10.258 5.546  42.397 1.000 23.53
ANISOU 2069 CH2 TRP  297 3298   2356   3285  -320  -1146  - 3 4 4
ATOM   2070 N   ILE  298 5.106  4.167  39.044 1.000 13.58
ANISOU 2070 N   ILE  298 1324   1726   2108  241  -167 1 2 7
ATOM   2071 CA  ILE  298 4.299  4.440  40.229 1.000 14.68
ANISOU 2071 CA  ILE  298 1413   2177   1986  -13  -161 -2 0 8
ATOM   2072 C   ILE  298 2.841  4.054  40.121 1.000 12.02
ANISOU 2072 C   ILE  298 1455   1300   1813  56 -239  4 0 2
ATOM   2073 O   ILE  298 2.182  3.782  41.147 1.000 13.67
ANISOU 2073 O   ILE  298 1732   1582   1881  -23  -4 1 9 3
ATOM   2074 CB  ILE  298 4.428  5.914  40.673 1.000 19.45
ANISOU 2074 CB  ILE  298 2261   2446   2683  -699  237  - 8 3 5
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ATOM   2075 CG1 ILE  298 5.907   6.245  41.001 1.000 27.83
ANISOU 2075 CG1 ILE  298 2776    4275   3525   -1314 -556 -1030
ATOM   2076 CG2 ILE  298 3.679   6.319  41.929 1.000 25.05
ANISOU 2076 CG2 ILE  298 3770    3344   2405   -57   255  -983
ATOM   2077 CD1 ILE  298 6.368   5.628  42.306 1.000 43.32
ANISOU 2077 CD1 ILE  298 4561    7224   4674   -652  -1890 -117
ATOM   2078 N   GLY  299 2.317   3.980  38.893 1.000 12.16
ANISOU 2078 N   GLY  299 1432    1308   1879   78    -304 106
ATOM   2079 CA  GLY  299 0.918   3.741  38.670 1.000 12.98
ANISOU 2079 CA  GLY  299 1276    1279   2379   106   -188 -154
ATOM   2080 C   GLY  299 0.135   5.017  38.378 1.000 13.09
ANISOU 2080 C   GLY  299 1421    1403   2151   113   -231 118
ATOM   2081 O   GLY  299 0.738   6.025  38.017 1.000 14.00
ANISOU 2081 O   GLY  299 1713    1353   2252   122   289  -13
ATOM   2082 N   GLY  300 -1.183  4.917  38.447 1.000 13.08
ANISOU 2082 N   GLY  300 1325    1545   2099   146   -267 -145
ATOM   2083 CA  GLY  300 -2.075  5.966  37.992 1.000 13.45
ANISOU 2083 CA  GLY  300 1447    1521   2143   116   -415 -143
ATOM   2084 C   GLY  300 -2.519  6.972  39.042 1.000 12.94
ANISOU 2084 C   GLY  300 1098    1365   2456   -52   -407 -192
ATOM   2085 O   GLY  300 -3.262  7.875  38.672 1.000 13.39
ANISOU 2085 O   GLY  300 1321    1342   2423   -19   -217 -45
ATOM   2086 N   ASN  301 -1.973  6.845  40.254 1.000 13.35
ANISOU 2086 N   ASN  301 1494    1429   2151   -225  -232 -104
ATOM   2087 CA  ASN  301 -2.162  7.842  41.313 1.000 13.83
ANISOU 2087 CA  ASN  301 1590    1435   2230   -194  -38  -61
ATOM   2088 C   ASN  301 -0.837  8.254  41.885 1.000 12.46
ANISOU 2088 C   ASN  301 1676    1268   1791   -35   -142 -20
ATOM   2089 O   ASN  301 -0.007  7.405  42.169 1.000 13.89
ANISOU 2089 O   ASN  301 1831    1355   2093   73    -144 -13
ATOM   2090 CB  ASN  301 -3.075  7.238  42.360 1.000 16.01
ANISOU 2090 CB  ASN  301 1632    1909   2542   77    224  315
ATOM   2091 CG  ASN  301 -3.942  8.199  43.106 1.000 18.23
ANISOU 2091 CG  ASN  301 1986    2508   2435   190   152  -90
ATOM   2092 OD1 ASN  301 -4.973  8.690  42.614 1.000 17.44
ANISOU 2092 OD1 ASN  301 1606    1626   3394   -21   144  -190
ATOM   2093 ND2 ASN  301 -3.518  8.454  44.338 1.000 33.30
ANISOU 2093 ND2 ASN  301 2804    6923   2928   1012  -230 -1523
ATOM   2094 N   TYR  302 -0.595  9.564  42.073 1.000 12.96
ANISOU 2094 N   TYR  302 1662    1278   1985   -69   -21  -135
ATOM   2095 CA  TYR  302 0.674   9.948  42.702 1.000 13.48
ANISOU 2095 CA  TYR  302 1673    1259   2192   -130  -132 34
ATOM   2096 C   TYR  302 0.768   9.269  44.078 1.000 12.63
ANISOU 2096 C   TYR  302 1413    1293   2092   53    44   19
ATOM   2097 O   TYR  302 -0.218  9.151  44.806 1.000 14.15
ANISOU 2097 O   TYR  302 1332    1737   2305   -65   48   -27
ATOM   2098 CB  TYR  302 0.764   11.472 42.916 1.000 13.30
ANISOU 2098 CB  TYR  302 1635    1192   2226   -81   33   41
ATOM   2099 CG  TYR  302 1.159   12.143 41.619 1.000 12.02
ANISOU 2099 CG  TYR  302 1586    1103   1880   -59   -25  -271
ATOM   2100 CD1 TYR  302 2.501   12.233 41.275 1.000 13.11
ANISOU 2100 CD1 TYR  302 1633    1284   2066   -80   11   -18
ATOM   2101 CD2 TYR  302 0.235   12.709 40.739 1.000 12.52
ANISOU 2101 CD2 TYR  302 1576    1132   2049   -44   13   -127
ATOM   2102 CE1 TYR  302 2.933   12.822 40.119 1.000 12.29
ANISOU 2102 CE1 TYR  302 1581    1043   2045   -185  -84  -77
ATOM   2103 CE2 TYR  302 0.637   13.273 39.535 1.000 14.12
ANISOU 2103 CE2 TYR  302 1462    1443   2458   -241  15   325
ATOM   2104 CZ  TYR  302 1.983   13.347 39.241 1.000 12.69
ANISOU 2104 CZ  TYR  302 1483    1224   2113   -287  -91  10
ATOM   2105 OH  TYR  302 2.376   13.866 38.013 1.000 13.42
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ANISOU 2105 OH  TYR  302 1505    1469    2124   -93    33  146
ATOM   2106 N   VAL  303 1.956   8.855   44.450 1.000 13.92
ANISOU 2106 N   VAL  303 1406    1637    2246   153    88  9 9
ATOM   2107 CA  VAL  303 2.355   8.336   45.746 1.000 14.51
ANISOU 2107 CA  VAL  303 1838    1320    2355   -137  -391 - 7 4
ATOM   2108 C   VAL  303 3.498   9.244   46.239 1.000 15.23
ANISOU 2108 C   VAL  303 1404    1507    2876   -102  -105 - 3 4 8
ATOM   2109 O   VAL  303 4.471   9.386   45.512 1.000 18.70
ANISOU 2109 O   VAL  303 1859    1861    3386   -239   326  - 5 0 4
ATOM   2110 CB  VAL  303 2.856   6.880   45.632 1.000 16.75
ANISOU 2110 CB  VAL  303 2140    1319    2905   16  -759  - 1 2 3
ATOM   2111 CG1 VAL  303 3.279   6.401   47.017 1.000 19.53
ANISOU 2111 CG1 VAL  303 2185    1951    3284   232   -1054  1 4 8
ATOM   2112 CG2 VAL  303 1.723   5.956   45.125 1.000 17.82
ANISOU 2112 CG2 VAL  303 2476    1442    2852   -213  -558 - 4 0 6
ATOM   2113 N   ASN  304 3.349   9.900   47.378 1.000 14.07
ANISOU 2113 N   ASN  304 1409    1369    2566   -39   -407 - 8 6
ATOM   2114 CA  ASN  304 4.317   10.928  47.772 1.000 14.31
ANISOU 2114 CA  ASN  304 1474    1387    2578   -102  -424 - 5 5
ATOM   2115 C   ASN  304 5.450   10.397  48.637 1.000 13.75
ANISOU 2115 C   ASN  304 1360    1487    2378   34  -274  - 8 7
ATOM   2116 O   ASN  304 6.539   10.962  48.584 1.000 14.60
ANISOU 2116 O   ASN  304 1314    1795    2438   -34    -55  - 3 2 0
ATOM   2117 CB  ASN  304 3.589   12.035  48.551 1.000 14.26
ANISOU 2117 CB  ASN  304 1710    1214    2494   6   -303  1 7 6
ATOM   2118 CG  ASN  304 2.535   12.661  47.642 1.000 14.81
ANISOU 2118 CG  ASN  304 1551    1627    2449   23  -114   4 0 2
ATOM   2119 OD1 ASN  304 2.866   13.255  46.622 1.000 16.52
ANISOU 2119 OD1 ASN  304 1896    1746    2636   80  19  5 8 9
ATOM   2120 ND2 ASN  304 1.290   12.595  48.102 1.000 18.43
ANISOU 2120 ND2 ASN  304 1560    2980    2463   127   -10  1 9 9
ATOM   2121 N   ILE  305 5.175   9.413   49.463 1.000 16.36
ANISOU 2121 N   ILE  305 1546    1553    3117   -78   -503 2 6 6
ATOM   2122 CA  ILE  305 6.173   8.890   50.407 1.000 14.85
ANISOU 2122 CA  ILE  305 1670    1537    2436   165   -277 - 4 0
ATOM   2123 C   ILE  305 6.183   7.372   50.352 1.000 15.78
ANISOU 2123 C   ILE  305 1527    1555    2914   95  -438   - 5 1
ATOM   2124 O   ILE  305 5.231   6.736   49.886 1.000 17.54
ANISOU 2124 O   ILE  305 1463    1789    3412   -131  -404 5
ATOM   2125 CB  ILE  305 5.949   9.430   51.818 1.000 17.80
ANISOU 2125 CB  ILE  305 2167    1962    2634   -23    265  - 2 0 9
ATOM   2126 CG1 ILE  305 4.578   9.091   52.416 1.000 18.93
ANISOU 2126 CG1 ILE  305 1716    2948    2526   1   -218  - 1 6 3
ATOM   2127 CG2 ILE  305 6.171   10.944  51.823 1.000 19.17
ANISOU 2127 CG2 ILE  305 2685    1863    2737   70  -534  - 4 0 5
ATOM   2128 CD1 ILE  305 4.415   9.459   53.863 1.000 21.28
ANISOU 2128 CD1 ILE  305 2521    2902    2662   19  452 - 7 1
ATOM   2129 N   ARG  306 7.246   6.806   50.908 1.000 14.59
ANISOU 2129 N   ARG  306 1738    1641    2165   52  -356   2 7 1
ATOM   2130 CA  ARG  306 7.424   5.360   50.828 1.000 15.25
ANISOU 2130 CA  ARG  306 1509    1663    2622   139   -302 7 7
ATOM   2131 C   ARG  306 8.234   4.903   52.024 1.000 15.02
ANISOU 2131 C   ARG  306 1588    1464    2656   133   -332 - 2 1
ATOM   2132 O   ARG  306 9.141   5.614   52.433 1.000 16.63
ANISOU 2132 O   ARG  306 1682    2101    2536   -219  -294 - 1 6 8
ATOM   2133 CB  ARG  306 8.135   4.943   49.532 1.000 16.31
ANISOU 2133 CB  ARG  306 1820    1681    2697   -100  -270 - 1 5 0
ATOM   2134 CG  ARG  306 8.226   3.414   49.377 1.000 18.43
ANISOU 2134 CG  ARG  306 2476    1700    2828   40  -194  - 1 5 6
ATOM   2135 CD  ARG  306 8.401   3.068   47.900 1.000 18.26
ANISOU 2135 CD  ARG  306 2087    1971    2880   -120  -145 - 3 3 0
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ATOM    2136 NE  ARG  306 7.136   3.228  47.188 1.000 20.53
ANISOU  2136 NE  ARG  306 2442    2013   3345  -577  -663 -234
ATOM    2137 CZ  ARG  306 6.980   3.178  45.873 1.000 20.27
ANISOU  2137 CZ  ARG  306 2330    2057   3316   373  -522 2 0
ATOM    2138 NH1 ARG  306 8.086   3.000  45.107 1.000 22.13
ANISOU  2138 NH1 ARG  306 2136    2580   3695   274  -589 -723
ATOM    2139 NH2 ARG  306 5.759   3.250  45.341 1.000 18.44
ANISOU  2139 NH2 ARG  306 2107    1838   3062   259  -285 8 4
ATOM    2140 N   ARG  307 7.898   3.775  52.612 1.000 19.10
ANISOU  2140 N   ARG  307 2716    1872   2671  -294  -607 327
ATOM    2141 CA  ARG  307 8.576   3.212  53.768 1.000 21.13
ANISOU  2141 CA  ARG  307 3321    2201   2504   -48  -845 139
ATOM    2142 C   ARG  307 9.536   2.138  53.277 1.000 23.30
ANISOU  2142 C   ARG  307 3417    2170   3267   181 -1046 3 9
ATOM    2143 O   ARG  307 9.385   1.601  52.187 1.000 21.01
ANISOU  2143 O   ARG  307 2574    2355   3052   174  -728 112
ATOM    2144 CB  ARG  307 7.557   2.522  54.694 1.000 27.30
ANISOU  2144 CB  ARG  307 4545    3184   2645   -13  -247 705
ATOM    2145 CG  ARG  307 6.839   3.488  55.629 1.000 46.30
ANISOU  2145 CG  ARG  307 6310    6374   4907   215  1655 -970
ATOM    2146 CD  ARG  307 7.054   3.085  57.085 1.000 66.50
ANISOU  2146 CD  ARG  307 11107   10355  3806 -2980  2792 -1145
ATOM    2147 NE  ARG  307 5.989   2.203  57.531 1.000 78.91
ANISOU  2147 NE  ARG  307 11821   12833  5330 -4530  1969 - 5
ATOM    2148 CZ  ARG  307 5.987   1.285  58.479 1.000 73.67
ANISOU  2148 CZ  ARG  307 7704    14382  5907 -4724  1249 1051
ATOM    2149 NH1 ARG  307 7.063   1.038  59.214 1.000 80.32
ANISOU  2149 NH1 ARG  307 6613    17949  5955 -3290  2179 1 05
ATOM    2150 NH2 ARG  307 4.872   0.597  58.707 1.000 73.74
ANISOU  2150 NH2 ARG  307 9116    15919  2983 -6954   438  -917
ATOM    2151 N   THR  308 10.551  1.861  54.113 1.000 25.61
ANISOU  2151 N   THR  308 4234    2212   3285   536 -1421 -232
ATOM    2152 CA  THR  308 11.308  0.640  53.822 1.000 30.02
ANISOU  2152 CA  THR  308 3468    1939   5998   225 -1629 -194
ATOM    2153 C   THR  308 10.468 -0.611  54.030 1.000 25.42
ANISOU  2153 C   THR  308 2915    2190   4552   453  -626 -321
ATOM    2154 O   THR  308 9.523  -0.768  54.787 1.000 30.10
ANISOU  2154 O   THR  308 4042    3482   3912   614  -217 -125
ATOM    2155 CB  THR  308 12.581  0.531  54.688 1.000 26.09
ANISOU  2155 CB  THR  308 2701    3586   3626   242  -361 -456
ATOM    2156 OG1 THR  308 12.140  0.751  56.028 1.000 32.90
ANISOU  2156 OG1 THR  308 4146    4188   4167   504   745 -495
ATOM    2157 CG2 THR  308 13.577  1.594  54.256 1.000 31.43
ANISOU  2157 CG2 THR  308 3193    4702   4047  -577  -132 -538
ATOM    2158 N   SER  309 10.850 -1.591  53.217 1.000 24.73
ANISOU  2158 N   SER  309 2934    2092   4370    94  -574  -391
ATOM    2159 CA  SER  309 10.199 -2.897  53.230 1.000 25.19
ANISOU  2159 CA  SER  309 3793    2464   3316  -485   451  -230
ATOM    2160 C   SER  309 10.466 -3.691  54.512 1.000 24.06
ANISOU  2160 C   SER  309 2360    2888   3893   302   107 3 5
ATOM    2161 O   SER  309 11.565 -3.621  55.084 1.000 34.54
ANISOU  2161 O   SER  309 3626    2131   7366   -76 -1944 - 34
ATOM    2162 CB  SER  309 10.639 -3.700  52.012 1.000 26.52
ANISOU  2162 CB  SER  309 3970    2159   3948   167   580  -366
ATOM    2163 OG  SER  309 10.217 -5.039  52.148 1.000 26.34
ANISOU  2163 OG  SER  309 3198    2207   4604   156  -844 -260
ATOM    2164 N   LYS  310 9.494  -4.458  54.961 1.000 24.99
ANISOU  2164 N   LYS  310 3172    2459   3864   160   262 3 66
ATOM    2165 CA  LYS  310 9.651  -5.339  56.125 1.000 28.38
ANISOU  2165 CA  LYS  310 4191    3167   3427   764   278 2 81
ATOM    2166 C   LYS  310 9.941  -6.768  55.711 1.000 26.07
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ANISOU 2166 C   LYS 310 3371    2687    3846   168   -290 5 7 7
ATOM   2167 O   LYS 310 10.150  -7.684  56.515 1.000 33.48
ANISOU 2167 O   LYS 310 5267    3056    4400   -66   -450 1073
ATOM   2168 CB  LYS 310 8.299   -5.367  56.858 1.000 37.77
ANISOU 2168 CB  LYS 310 5736    4695    3921   299   1818 1 8
ATOM   2169 CG  LYS 310 8.014   -4.214  57.806 1.000 40.55
ANISOU 2169 CG  LYS 310 6395    4716    4295   1525  1524 1 0 1
ATOM   2170 CD  LYS 310 6.798   -4.587  58.649 1.000 44.24
ANISOU 2170 CD  LYS 310 9091    4224    3495   1053  2816 5 8 4
ATOM   2171 CE  LYS 310 6.722   -6.109  58.818 1.000 59.12
ANISOU 2171 CE  LYS 310 9281    4577    8606   766   -82  2 4 7 8
ATOM   2172 NZ  LYS 310 6.088   -6.563  60.089 1.000 55.80
ANISOU 2172 NZ  LYS 310 4884    5742    10577  287   -947 4796
ATOM   2173 N   ALA 311 9.896   -7.030  54.410 1.000 22.45
ANISOU 2173 N   ALA 311 2190    2402    3939   10 52 2 6 9
ATOM   2174 CA  ALA 311 10.360  -8.369  53.972 1.000 31.89
ANISOU 2174 CA  ALA 311 3771    2594    5753   434   -516 - 4 2 1
ATOM   2175 C   ALA 311 11.909  -8.459  53.833 1.000 23.30
ANISOU 2175 C   ALA 311 3907    2328    2616   1393  -593 1 1 2
ATOM   2176 CB  ALA 311 9.619   -8.665  52.674 1.000 27.94
ANISOU 2176 CB  ALA 311 2407    2878    5329   -355  542  - 6 7 2
ATOM   2177 OW  HOH 501 -6.477  10.237  44.256 1.000 15.66
ATOM   2178 OW  HOH 502 -9.349  16.189  51.010 1.000 19.26
ATOM   2179 OW  HOH 503 -1.489  3.653   34.560 1.000 15.78
ATOM   2180 OW  HOH 504 -10.499 18.731  50.182 1.000 16.19
ATOM   2181 OW  HOH 505 -8.612  16.958  47.640 1.000 17.30
ATOM   2182 OW  HOH 506 -10.255 20.839  42.881 1.000 19.05
ATOM   2183 OW  HOH 507 2.096   1.076   32.810 1.000 29.32
ATOM   2184 OW  HOH 508 -0.284  4.743   41.885 1.000 13.93
ATOM   2185 OW  HOH 509 -8.525  18.553  42.416 1.000 21.33
ATOM   2186 OW  HOH 510 3.165   2.604   43.488 1.000 24.59
ATOM   2187 OW  HOH 511 -6.282  19.386  52.341 1.000 18.98
ATOM   2188 OW  HOH 512 -6.826  24.638  46.833 1.000 21.77
ATOM   2189 OW  HOH 513 10.510  -4.344  46.092 1.000 25.88
ATOM   2190 OW  HOH 514 -0.806  16.964  40.372 1.000 16.54
ATOM   2191 OW  HOH 515 -1.269  18.855  42.411 1.000 15.76
ATOM   2192 OW  HOH 516 14.277  -5.146  40.175 1.000 15.53
ATOM   2193 OW  HOH 517 -0.123  21.538  40.640 1.000 17.22
ATOM   2194 OW  HOH 518 13.131  -0.967  51.791 1.000 31.17
ATOM   2195 OW  HOH 519 11.009  2.875   45.599 1.000 20.20
ATOM   2196 OW  HOH 520 5.789   13.543  45.996 1.000 17.36
ATOM   2197 OW  HOH 521 2.168   19.767  55.925 1.000 20.41
ATOM   2198 OW  HOH 522 8.487   15.960  34.949 1.000 15.40
ATOM   2199 OW  HOH 523 10.794  12.697  29.921 1.000 19.99
ATOM   2200 OW  HOH 524 -11.722 19.112  44.516 1.000 19.82
ATOM   2201 OW  HOH 525 1.672   -2.081  35.124 1.000 16.29
ATOM   2202 OW  HOH 526 9.651   15.283  32.342 1.000 20.37
ATOM   2203 OW  HOH 527 28.749  31.187  52.019 1.000 18.53
ATOM   2204 OW  HOH 528 15.326  11.252  32.041 1.000 19.60
ATOM   2205 OW  HOH 529 26.897  26.984  52.035 1.000 19.86
ATOM   2206 OW  HOH 530 13.528  11.592  50.915 1.000 16.17
ATOM   2207 OW  HOH 531 25.631  32.409  52.682 1.000 19.20
ATOM   2208 OW  HOH 532 18.287  6.835   52.185 1.000 18.49
ATOM   2209 OW  HOH 533 12.635  29.035  39.395 1.000 18.09
ATOM   2210 OW  HOH 534 10.797  31.968  45.659 1.000 20.66
ATOM   2211 OW  HOH 535 10.167  24.890  33.567 1.000 19.12
ATOM   2212 OW  HOH 536 23.530  24.122  58.531 1.000 20.39
ATOM   2213 OW  HOH 537 23.358  12.639  35.292 1.000 22.61
ATOM   2214 OW  HOH 538 25.879  28.699  50.264 1.000 19.44
ATOM   2215 OW  HOH 539 11.674  16.559  30.502 1.000 18.57
ATOM   2216 OW  HOH 540 18.515  27.775  40.042 1.000 22.23
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ATOM   2217 OW   HOH   541 21.233  20.367   33.996 1.000 21.45
ATOM   2218 OW   HOH   542 22.826  32.643   53.094 1.000 19.38
ATOM   2219 OW   HOH   543 19.670  22.387   35.310 1.000 20.05
ATOM   2220 OW   HOH   544 -13.591 21.996   61.494 1.000 49.93
ATOM   2221 OW   HOH   545 21.295  11.783   55.080 1.000 20.04
ATOM   2222 OW   HOH   546 5.431   2.533    51.677 1.000 28.11
ATOM   2223 OW   HOH   547 17.311  25.489   32.148 1.000 24.38
ATOM   2224 OW   HOH   548 17.427  7.744    33.008 1.000 20.78
ATOM   2225 OW   HOH   549 11.656  23.874   58.194 1.000 23.39
ATOM   2226 OW   HOH   550 8.037   14.987   53.326 1.000 33.52
ATOM   2227 OW   HOH   551 1.354   14.574   33.889 1.000 21.05
ATOM   2228 OW   HOH   552 11.203  20.116   63.686 1.000 24.59
ATOM   2229 OW   HOH   553 2.671   21.240   34.245 1.000 34.51
ATOM   2230 OW   HOH   554 6.339   19.832   30.751 1.000 26.36
ATOM   2231 OW   HOH   555 26.611  24.519   55.570 1.000 21.22
ATOM   2232 OW   HOH   556 27.669  17.156   53.039 1.000 25.86
ATOM   2233 OW   HOH   557 -14.392 19.977   44.154 1.000 25.03
ATOM   2234 OW   HOH   558 14.828  32.652   51.443 1.000 25.23
ATOM   2235 OW   HOH   559 17.937  7.207    54.915 1.000 20.59
ATOM   2236 OW   HOH   560 10.729  -8.875   31.499 1.000 24.65
ATOM   2237 OW   HOH   561 6.455   2.298    42.613 1.000 22.74
ATOM   2238 OW   HOH   562 13.784  31.245   44.166 1.000 27.75
ATOM   2239 OW   HOH   563 17.292  33.470   53.556 1.000 25.28
ATOM   2240 OW   HOH   564 11.210  1.109    49.697 1.000 23.33
ATOM   2241 OW   HOH   565 -11.339 25.246   41.370 1.000 26.08
ATOM   2242 OW   HOH   566 20.363  -8.375   38.242 1.000 30.07
ATOM   2243 OW   HOH   567 3.890   24.604   35.837 1.000 25.86
ATOM   2244 OW   HOH   568 5.334   11.875   43.937 1.000 25.45
ATOM   2245 OW   HOH   569 7.861   22.385   64.046 1.000 28.98
ATOM   2246 OW   HOH   570 7.754   -1.508   30.848 1.000 24.72
ATOM   2247 OW   HOH   571 6.297   3.583    28.471 1.000 33.06
ATOM   2248 OW   HOH   572 -15.790 28.800   51.855 1.000 30.09
ATOM   2249 OW   HOH   573 -5.388  20.310   38.883 1.000 23.64
ATOM   2250 OW   HOH   574 17.657  21.059   29.053 1.000 24.31
ATOM   2251 OW   HOH   575 8.763   20.920   66.102 1.000 24.81
ATOM   2252 OW   HOH   576 10.135  27.617   58.357 1.000 25.12
ATOM   2253 OW   HOH   577 7.795   1.060    29.730 1.000 29.00
ATOM   2254 OW   HOH   578 22.601  19.580   61.946 1.000 28.66
ATOM   2255 OW   HOH   579 8.859   4.744    27.898 1.000 26.12
ATOM   2256 OW   HOH   580 4.937   3.932    48.882 1.000 26.29
ATOM   2257 OW   HOH   581 17.096  5.891    35.057 1.000 23.31
ATOM   2258 OW   HOH   582 -16.337 31.047   64.719 1.000 54.01
ATOM   2259 OW   HOH   583 7.652   24.826   52.106 1.000 27.23
ATOM   2260 OW   HOH   584 7.174   24.915   29.292 1.000 26.60
ATOM   2261 OW   HOH   585 23.452  10.614   55.439 1.000 26.42
ATOM   2262 OW   HOH   586 12.640  26.413   58.676 1.000 27.15
ATOM   2263 OW   HOH   587 6.204   21.166   62.094 1.000 24.65
ATOM   2264 OW   HOH   588 2.385   0.810    37.616 1.000 19.92
ATOM   2265 OW   HOH   589 32.930  28.236   45.738 1.000 38.29
ATOM   2266 OW   HOH   590 -12.045 28.716   45.065 1.000 30.46
ATOM   2267 OW   HOH   591 0.219   13.612   36.120 1.000 27.12
ATOM   2268 OW   HOH   592 -2.525  3.881    43.344 1.000 26.67
ATOM   2269 OW   HOH   593 7.533   13.297   48.055 1.000 19.59
ATOM   2270 OW   HOH   594 -1.575  28.355   42.057 1.000 25.53
ATOM   2271 OW   HOH   595 11.209  -1.188   46.425 1.000 22.12
ATOM   2272 OW   HOH   596 5.684   -7.000   28.451 1.000 27.97
ATOM   2273 OW   HOH   597 28.868  19.406   51.825 1.000 27.72
ATOM   2274 OW   HOH   598 13.432  2.493    57.904 1.000 31.12
ATOM   2275 OW   HOH   599 8.196   7.483    27.148 1.000 29.99
ATOM   2276 OW   HOH   600 20.809  19.088   63.369 1.000 36.86
ATOM   2277 OW   HOH   601 21.352  10.656   34.614 1.000 30.60
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ATOM   2278 OW   HOH   602  2.891    7.196   30.899 1.000 25.41
ATOM   2279 OW   HOH   603  8.260   26.496   34.561 1.000 35.71
ATOM   2280 OW   HOH   604 22.300   13.959   31.378 1.000 32.53
ATOM   2281 OW   HOH   605 15.689   35.750   48.870 1.000 31.17
ATOM   2282 OW   HOH   606  7.219   15.638   30.914 1.000 27.80
ATOM   2283 OW   HOH   607 -3.237   14.604   47.092 1.000 20.96
ATOM   2284 OW   HOH   608 17.543   10.581   33.561 1.000 23.51
ATOM   2285 OW   HOH   609 -1.899   36.370   44.261 1.000 32.64
ATOM   2286 OW   HOH   610 26.095   14.431   43.803 1.000 19.19
ATOM   2287 OW   HOH   611 27.664   13.183   41.954 1.000 26.48
ATOM   2288 OW   HOH   612  4.302   34.604   49.981 1.000 24.70
ATOM   2289 OW   HOH   613 -15.580  27.012   46.728 1.000 42.45
ATOM   2290 OW   HOH   614  1.615   35.544   50.347 1.000 23.78
ATOM   2291 OW   HOH   615 -10.137  34.259   49.033 1.000 23.94
ATOM   2292 OW   HOH   616 26.084    6.502   57.657 1.000 39.32
ATOM   2293 OW   HOH   617 -15.962  20.656   46.340 1.000 25.94
ATOM   2294 OW   HOH   618  6.113   29.517   40.143 1.000 29.43
ATOM   2295 OW   HOH   619 19.797    4.627   51.313 1.000 27.15
ATOM   2296 OW   HOH   620 -1.748   11.315   48.716 1.000 21.83
ATOM   2297 OW   HOH   621 11.099   34.289   44.259 1.000 27.15
ATOM   2298 OW   HOH   622 28.352   14.351   37.877 1.000 41.48
ATOM   2299 OW   HOH   623 -2.826   36.968   57.149 1.000 32.75
ATOM   2300 OW   HOH   624 16.983    9.258   29.962 1.000 32.82
ATOM   2301 OW   HOH   625 16.780   29.213   38.384 1.000 27.96
ATOM   2302 OW   HOH   626  1.632   17.213   33.689 1.000 23.17
ATOM   2303 OW   HOH   627 33.536   23.640   45.028 1.000 41.91
ATOM   2304 OW   HOH   628 23.821    6.059   50.174 1.000 34.22
ATOM   2305 OW   HOH   629  3.482    2.785   46.751 1.000 39.07
ATOM   2306 OW   HOH   630 20.218   24.803   60.918 1.000 50.12
ATOM   2307 OW   HOH   631  3.366   16.272   30.698 1.000 31.50
ATOM   2308 OW   HOH   632 18.871   11.791   31.384 1.000 30.78
ATOM   2309 OW   HOH   633  4.455   25.782   58.823 1.000 32.14
ATOM   2310 OW   HOH   634 24.721    5.202   40.319 1.000 40.13
ATOM   2311 OW   HOH   635 19.623   35.238   43.466 1.000 50.48
ATOM   2312 OW   HOH   636 22.789   26.242   60.797 1.000 26.58
ATOM   2313 OW   HOH   637  7.008   -4.809   54.039 1.000 33.89
ATOM   2314 OW   HOH   638 -15.821  18.362   42.559 1.000 29.61
ATOM   2315 OW   HOH   639 -11.847  15.711   52.841 1.000 25.21
ATOM   2316 OW   HOH   640 -1.948   13.411   35.401 1.000 30.41
ATOM   2317 OW   HOH   641 -14.293  21.937   42.145 1.000 27.58
ATOM   2318 OW   HOH   642 18.216   20.839   66.863 1.000 31.23
ATOM   2319 OW   HOH   643  9.836   36.288   48.178 1.000 44.21
ATOM   2320 OW   HOH   644  3.510   16.168   66.253 1.000 33.82
ATOM   2321 OW   HOH   645  7.571   33.398   41.687 1.000 37.96
ATOM   2322 OW   HOH   646  0.780   21.844   36.729 1.000 31.71
ATOM   2323 OW   HOH   647 21.244   -2.321   35.579 1.000 32.40
ATOM   2324 OW   HOH   648  3.027   25.244   69.907 1.000 36.84
ATOM   2325 OW   HOH   649  1.129   25.273   66.516 1.000 35.42
ATOM   2326 OW   HOH   650 14.646    7.560   60.327 1.000 46.42
ATOM   2327 OW   HOH   651 -8.287   26.381   37.998 1.000 29.17
ATOM   2328 OW   HOH   652 10.153   23.548   67.703 1.000 31.50
ATOM   2329 OW   HOH   653 28.906   22.258   38.969 1.000 32.66
ATOM   2330 OW   HOH   654 13.568   -4.482   31.517 1.000 26.94
ATOM   2331 OW   HOH   655 -12.635  17.106   55.637 1.000 26.85
ATOM   2332 OW   HOH   656  2.698    5.770   50.702 1.000 29.05
ATOM   2333 OW   HOH   657 -1.384    7.487   46.512 1.000 36.52
ATOM   2334 OW   HOH   658  3.880   19.246   31.498 1.000 31.50
ATOM   2335 OW   HOH   659 -1.400   31.406   64.001 1.000 56.62
ATOM   2336 OW   HOH   660 11.416   23.260   65.229 1.000 32.69
ATOM   2337 OW   HOH   661 15.994   14.673   25.680 1.000 36.46
ATOM   2338 OW   HOH   662 28.572   21.242   53.423 1.000 39.06
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ATOM	2339	OW	HOH	663	19.354	0.465	27.273	1.000	44.56
ATOM	2340	OW	HOH	664	24.969	27.026	38.838	1.000	35.41
ATOM	2341	OW	HOH	665	24.294	7.488	55.914	1.000	32.97
ATOM	2342	OW	HOH	666	19.540	7.882	31.178	1.000	30.04
ATOM	2343	OW	HOH	667	-9.236	32.988	57.241	1.000	39.20
ATOM	2344	OW	HOH	668	2.098	18.351	67.496	1.000	38.83
ATOM	2345	OW	HOH	669	11.390	3.245	56.270	1.000	37.56
ATOM	2346	OW	HOH	670	-21.413	24.449	52.026	1.000	44.66
ATOM	2347	OW	HOH	671	-14.575	19.220	55.240	1.000	30.91
ATOM	2348	OW	HOH	672	32.112	25.958	43.051	1.000	33.34
ATOM	2349	OW	HOH	673	-15.050	31.151	53.232	1.000	34.71
ATOM	2350	OW	HOH	674	2.941	-1.607	30.245	1.000	34.63
ATOM	2351	OW	HOH	675	26.951	14.544	34.757	1.000	49.17
ATOM	2352	OW	HOH	676	14.707	30.669	39.386	1.000	30.55
ATOM	2353	OW	HOH	677	5.203	18.009	68.080	1.000	43.41
ATOM	2354	OW	HOH	678	14.151	7.965	26.591	1.000	38.80
ATOM	2355	OW	HOH	679	24.470	24.261	41.443	1.000	31.28
ATOM	2356	OW	HOH	680	17.540	2.410	28.478	1.000	34.31
ATOM	2357	OW	HOH	681	25.992	20.593	34.326	1.000	39.66
ATOM	2358	OW	HOH	682	13.802	35.357	44.421	1.000	34.06
ATOM	2359	OW	HOH	683	1.087	2.355	45.456	1.000	35.39
ATOM	2360	OW	HOH	684	22.443	34.538	42.053	1.000	33.55
ATOM	2361	OW	HOH	685	4.419	4.720	27.356	1.000	48.02
ATOM	2362	OW	HOH	686	-15.830	34.507	51.877	1.000	50.63
ATOM	2363	OW	HOH	687	-15.217	29.490	48.887	1.000	33.54
ATOM	2364	OW	HOH	688	36.808	21.183	46.206	1.000	44.97
ATOM	2365	OW	HOH	689	3.756	1.312	29.272	1.000	35.16
ATOM	2366	OW	HOH	690	18.802	13.646	27.901	1.000	30.08
ATOM	2367	OW	HOH	691	6.997	17.521	29.313	1.000	47.70
ATOM	2368	OW	HOH	692	13.725	16.327	69.105	1.000	36.97
ATOM	2369	OW	HOH	693	22.369	22.161	60.503	1.000	44.09
ATOM	2370	OW	HOH	694	-5.429	31.620	42.219	1.000	33.40
ATOM	2371	OW	HOH	695	19.351	23.082	30.744	1.000	34.21
ATOM	2372	OW	HOH	696	6.897	22.414	29.376	1.000	36.59
ATOM	2373	OW	HOH	697	28.700	7.809	57.304	1.000	38.35
ATOM	2374	OW	HOH	698	3.224	0.679	39.819	1.000	24.13
ATOM	2375	OW	HOH	699	-4.634	33.717	62.593	1.000	32.26
ATOM	2376	OW	HOH	700	32.423	17.018	43.200	1.000	43.20
ATOM	2377	OW	HOH	701	12.119	25.228	68.342	1.000	39.95
ATOM	2378	OW	HOH	702	9.307	16.477	28.976	1.000	31.75
ATOM	2379	OW	HOH	703	-11.313	34.067	46.117	1.000	49.40
ATOM	2380	OW	HOH	704	7.774	31.390	65.371	1.000	39.12
ATOM	2381	OW	HOH	705	24.764	7.530	36.802	1.000	38.55
ATOM	2382	OW	HOH	706	-22.095	25.669	59.047	1.000	36.71
ATOM	2383	OW	HOH	707	14.509	9.840	68.854	1.000	50.38
ATOM	2384	OW	HOH	708	-10.129	28.722	42.036	1.000	38.92
ATOM	2385	OW	HOH	709	29.011	34.910	48.390	1.000	35.29
ATOM	2386	OW	HOH	710	15.822	31.612	42.021	1.000	33.61
ATOM	2387	OW	HOH	711	-1.996	17.676	33.645	1.000	49.57
ATOM	2388	OW	HOH	712	10.216	17.748	26.015	1.000	41.04
ATOM	2389	OW	HOH	713	23.535	29.642	37.371	1.000	43.47
ATOM	2390	OW	HOH	714	20.488	-7.214	35.599	1.000	45.99
ATOM	2391	OW	HOH	715	11.411	10.149	25.081	1.000	41.63
ATOM	2392	OW	HOH	716	19.329	-4.258	34.139	1.000	42.50
ATOM	2393	OW	HOH	717	13.688	26.799	66.321	1.000	43.74
ATOM	2394	OW	HOH	718	-10.751	33.064	54.747	1.000	40.47
ATOM	2395	OW	HOH	719	13.800	18.258	70.756	1.000	34.54
ATOM	2396	OW	HOH	720	17.151	5.815	28.003	1.000	40.80
ATOM	2397	OW	HOH	721	0.000	0.000	36.691	0.330	27.42
ATOM	2398	OW	HOH	722	0.000	0.000	41.559	0.330	37.77
ATOM	2399	OW	HOH	723	15.314	7.549	28.791	1.000	36.24

ATOM	2400	OW	HOH	724	-1.663	19.944	39.196	1.000	33.87
ATOM	2401	OW	HOH	725	19.289	24.195	33.321	1.000	32.28
ATOM	2402	OW	HOH	726	0.000	0.000	31.798	0.330	50.38
ATOM	2403	OW	HOH	727	-1.223	38.165	59.229	1.000	31.24
ATOM	2404	OW	HOH	728	22.035	38.254	45.742	1.000	48.21
ATOM	2405	OW	HOH	729	28.388	16.248	63.044	1.000	31.59
ATOM	2406	OW	HOH	730	0.000	0.000	45.995	0.330	36.14
ATOM	2407	OW	HOH	731	2.984	29.007	40.091	1.000	36.08
ATOM	2408	OW	HOH	732	5.297	15.835	27.318	1.000	41.53
ATOM	2409	OW	HOH	733	17.347	10.778	27.373	1.000	35.27
ATOM	2410	OW	HOH	734	29.417	14.607	53.127	1.000	40.12
ATOM	2411	OW	HOH	735	4.222	-8.636	27.012	1.000	35.22
ATOM	2412	OW	HOH	736	-9.949	17.712	62.813	1.000	34.43
ATOM	2413	OW	HOH	737	13.960	-10.203	55.259	1.000	31.79
ATOM	2414	OW	HOH	738	11.831	-1.522	49.308	1.000	25.22
ATOM	2415	OW	HOH	739	2.896	4.247	29.596	1.000	38.64
ATOM	2416	OW	HOH	740	10.959	13.759	25.528	1.000	61.86
ATOM	2417	OW	HOH	741	0.864	17.227	30.557	1.000	50.71
ATOM	2418	OW	HOH	742	31.755	18.949	52.065	1.000	40.48
ATOM	2419	OW	HOH	743	21.678	-0.485	28.218	1.000	43.23
ATOM	2420	OW	HOH	744	10.583	16.397	75.211	1.000	45.04
ATOM	2421	OW	HOH	745	7.480	7.996	78.287	1.000	57.64
ATOM	2422	OW	HOH	746	24.067	35.122	40.297	1.000	41.95
ATOM	2423	OW	HOH	747	7.804	10.269	78.332	1.000	49.63
ATOM	2424	OW	HOH	748	22.131	40.645	45.806	1.000	49.69
ATOM	2425	OW	HOH	749	14.850	-4.647	33.872	1.000	42.88
ATOM	2426	OW	HOH	750	-12.930	32.504	55.211	1.000	37.15
ATOM	2427	OW	HOH	751	-4.832	35.986	43.333	1.000	44.39
ATOM	2428	OW	HOH	752	19.834	33.566	56.449	1.000	31.56
ATOM	2429	OW	HOH	753	3.363	22.310	29.844	1.000	42.02
ATOM	2430	OW	HOH	754	25.594	4.030	34.174	1.000	51.90
ATOM	2431	OW	HOH	755	28.036	35.859	46.448	1.000	39.50
ATOM	2432	OW	HOH	756	-12.951	16.294	61.787	1.000	40.94
ATOM	2433	OW	HOH	757	-10.870	26.452	38.737	1.000	44.85
ATOM	2434	OW	HOH	758	13.216	12.896	70.729	1.000	63.42
ATOM	2435	OW	HOH	759	-0.403	21.161	74.990	1.000	38.96
ATOM	2436	OW	HOH	760	-7.025	32.526	64.316	1.000	39.64
ATOM	2437	OW	HOH	761	-15.459	19.739	58.090	1.000	40.84
ATOM	2438	OW	HOH	762	-4.964	36.577	59.068	1.000	48.64
ATOM	2439	OW	HOH	763	26.807	35.717	50.036	1.000	43.54
ATOM	2440	OW	HOH	764	19.542	7.083	65.538	1.000	41.41
ATOM	2441	OW	HOH	765	3.709	35.837	42.709	1.000	33.78
ATOM	2442	OW	HOH	766	0.431	33.688	40.172	1.000	36.91
ATOM	2443	OW	HOH	767	18.620	5.064	64.617	1.000	45.76
ATOM	2444	OW	HOH	768	35.526	19.792	41.322	1.000	52.54
ATOM	2445	OW	HOH	769	19.671	7.789	67.717	1.000	43.44
ATOM	2446	OW	HOH	770	3.562	12.048	26.149	1.000	40.08
ATOM	2447	OW	HOH	771	20.245	35.637	53.927	1.000	52.16
ATOM	2448	OW	HOH	772	-20.588	25.640	61.573	1.000	58.60
ATOM	2449	OW	HOH	773	1.556	37.342	52.171	1.000	36.23
ATOM	2450	OW	HOH	774	8.340	0.668	49.382	1.000	107.24
ATOM	2451	OW	HOH	775	27.160	2.372	34.466	1.000	59.84
ATOM	2452	OW	HOH	776	6.575	19.271	25.545	1.000	36.68

ATOM	2453	OW	HOH	777	-17.605	29.205	62.661	1.000	56.83
ATOM	2454	OW	HOH	778	7.616	6.902	24.722	1.000	61.34
ATOM	2455	OW	HOH	779	19.749	10.700	68.006	1.000	65.22
ATOM	2456	W	HOH	780	7.281	-5.270	50.090	1.000	50.00
ATOM	2457	W	HOH	781	-6.809	28.483	40.515	1.000	50.00
ATOM	2458	W	HOH	782	9.990	17.263	38.636	1.000	50.00
ATOM	2459	W	HOH	783	5.767	-2.331	28.939	1.000	50.00
ATOM	2460	W	HOH	784	11.694	-0.118	24.984	1.000	50.00
ATOM	2461	W	HOH	785	24.442	7.952	47.994	1.000	50.00
ATOM	2462	W	HOH	786	14.251	36.889	46.491	1.000	50.00
ATOM	2463	W	HOH	787	5.759	26.477	33.851	1.000	50.00
ATOM	2464	W	HOH	788	-11.816	22.606	40.795	1.000	50.00
ATOM	2465	W	HOH	789	-2.531	5.579	45.829	1.000	50.00
ATOM	2466	W	HOH	790	-13.002	32.034	46.612	1.000	50.00
ATOM	2467	W	HOH	791	2.230	3.555	48.985	1.000	50.00
ATOM	2468	W	HOH	792	9.397	13.464	28.121	1.000	50.00
ATOM	2469	W	HOH	793	28.257	10.442	42.781	1.000	50.00
ATOM	2470	W	HOH	794	4.652	17.944	59.241	1.000	50.00
ATOM	2471	W	HOH	795	5.977	15.287	79.554	1.000	50.00
ATOM	2472	W	HOH	796	30.501	11.852	47.616	1.000	50.00
ATOM	2473	W	HOH	797	5.625	14.258	54.367	1.000	50.00
ATOM	2474	W	HOH	798	23.942	20.228	33.277	1.000	50.00
ATOM	2475	W	HOH	799	10.164	14.642	58.997	1.000	50.00
ATOM	2476	W	HOH	800	7.807	31.943	52.999	1.000	50.00
ATOM	2477	W	HOH	801	23.377	9.361	34.817	1.000	50.00
ATOM	2478	W	HOH	802	21.193	9.722	32.004	1.000	50.00
ATOM	2479	W	HOH	803	34.928	14.644	46.038	1.000	50.00
ATOM	2480	W	HOH	804	29.073	16.684	34.445	1.000	50.00
ATOM	2481	W	HOH	805	7.008	-2.049	51.872	1.000	50.00
ATOM	2482	W	HOH	806	25.363	7.860	45.531	1.000	50.00
ATOM	2483	W	HOH	807	30.704	8.207	55.971	1.000	50.00
ATOM	2484	W	HOH	808	33.072	24.900	40.599	1.000	50.00
ATOM	2485	W	HOH	809	-15.577	19.225	63.152	1.000	50.00
ATOM	2486	W	HOH	810	6.072	18.137	23.603	1.000	50.00
ATOM	2487	W	HOH	811	-7.214	39.940	55.639	1.000	50.00
ATOM	2488	W	HOH	812	5.509	18.517	74.919	1.000	50.00
ATOM	2489	W	HOH	813	33.845	9.908	56.672	1.000	50.00
ATOM	2490	W	HOH	814	0.421	35.779	42.931	1.000	50.00
ATOM	2491	W	HOH	815	35.282	21.705	48.656	1.000	50.00
ATOM	2492	W	HOH	816	39.344	22.173	46.871	1.000	50.00
ATOM	2493	W	HOH	817	-5.192	39.820	60.056	1.000	50.00
ATOM	2494	W	HOH	818	30.199	13.039	33.383	1.000	50.00
ATOM	2495	W	HOH	819	-4.860	36.454	61.731	1.000	50.00
ATOM	2496	W	HOH	820	-14.599	17.407	58.382	1.000	50.00
ATOM	2497	W	HOH	821	1.340	-0.111	41.711	0.500	50.00
ATOM	2498	W	HOH	822	34.512	23.218	52.108	1.000	50.00
ATOM	2499	W	HOH	823	32.136	12.571	52.190	1.000	50.00
ATOM	2500	W	HOH	824	13.525	-6.549	29.838	1.000	50.00
ATOM	2501	W	HOH	825	6.072	-4.141	27.534	1.000	50.00

STRUCTURE B

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ATOM      1      CB   MET   1    31.030   11.882   57.066   1.000 50.96
ANISOU  1      CB   MET   1     5663     3892     9809     1113  -2217 -5 5 4
ATOM      2      CG   MET   1    30.206   12.690   56.086   1.000 51.63
ANISOU  2      CG   MET   1     6595     3775     9246      691  -1891 1 6 9
ATOM      3      SD   MET   1    28.694   11.848   55.559   1.000 40.50
ANISOU  3      SD   MET   1     7003     3962     4424      833  -1535 -4 6 0
ATOM      4      CE   MET   1    27.852   11.584   57.120   1.000 45.32
ANISOU  4      CE   MET   1     8632     3912     4677     -239   -653 -1 7 0 2
ATOM      5      C    MET   1    31.587   13.367   58.999   1.000 52.14
ANISOU  5      C    MET   1     6204     4752     8854      287  -2128 -6 3
ATOM      6      O    MET   1    31.239   12.847   60.058   1.000 52.92
ANISOU  6      O    MET   1     7381     5242     7483     1417  -4224 5 1 9
ATOM      7      N    MET   1    33.170   11.646   58.275   1.000 57.78
ANISOU  7      N    MET   1     4533     6034    11388       34  -1912 -8 1 1
ATOM      8      CA   MET   1    32.156   -2.587   57.819   1.000 54.62
ANISOU  8      CA   MET   1     6441     4752     9560      137  -2012 -6 1 7
ATOM      9      N    ASP   2    31.485   14.679   58.792   1.000 43.52
ANISOU  9      N    ASP   2     3460     4866     8210      474  -2350 4 7
ATOM     10      CA   ASP   2    30.759   15.471   59.796   1.000 41.69
ANISOU 10      CA   ASP   2     4439     4678     6722     -309  -2603 -3 1
ATOM     11      CB   ASP   2    31.206   16.912   59.644   1.000 37.89
ANISOU 11      CB   ASP   2     3805     4768     5822     -304  -3473 2 6 6
ATOM     12      CG   ASP   2    30.219   17.958   60.121   1.000 39.59
ANISOU 12      CG   ASP   2     4511     4616     5916       15  -3218 5 8 9
ATOM     13      OD1  ASP   2    29.325   17.637   60.933   1.000 45.10
ANISOU 13      OD1  ASP   2     5866     4689     6581     -553  -1950 -6 2 5
ATOM     14      OD2  ASP   2    30.363   19.121   59.663   1.000 42.05
ANISOU 14      OD2  ASP   2     5994     4341     5643     -465  -3788 1 4 5
ATOM     15      C    ASP   2    29.275   15.213   59.556   1.000 33.84
ANISOU 15      C    ASP   2     4131     3634     5094      -59  -1682 -1 2 2
ATOM     16      O    ASP   2    28.901   15.176   58.379   1.000 29.25
ANISOU 16      O    ASP   2     2232     4393     4489      658   -390 -6 1 5
ATOM     17      N    THR   3    28.467   15.029   60.597   1.000 29.41
ANISOU 17      N    THR   3     4731     2636     3807      907  -2076 -2 8 4
ATOM     18      CA   THR   3    27.046   14.764   60.421   1.000 28.55
ANISOU 18      CA   THR   3     4602     2494     3753      597  -1006 -3 9 0
ATOM     19      CB   THR   3    26.447   13.762   61.414   1.000 36.51
ANISOU 19      CB   THR   3     7170     2209     4495     -791  -1996 5 2
ATOM     20      OG1  THR   3    26.629   14.220   62.758   1.000 42.45
ANISOU 20      OG1  THR   3     9519     2620     3989     -920  -1251 3 8 3
ATOM     21      CG2  THR   3    27.153   12.412   61.315   1.000 50.26
ANISOU 21      CG2  THR   3     9604     1863     7630     -602   -733 -3 3 3
ATOM     22      C    THR   3    26.240   16.061   60.553   1.000 29.01
ANISOU 22      C    THR   3     4535     2548     3939      738  -1079 9 9
ATOM     23      O    THR   3    25.041   16.044   60.827   1.000 35.82
ANISOU 23      O    THR   3     5149     2485     5976      390    524 -1 2 4 6
ATOM     24      N    THR   4    26.928   17.181   60.332   1.000 24.98
ANISOU 24      N    THR   4     3874     2456     3162      542  -2040 -9 8 6
ATOM     25      CA   THR   4    26.214   18.465   60.327   1.000 23.97
ANISOU 25      CA   THR   4     3437     2426     3244      344  -1563 -3 7 5
ATOM     26      CB   THR   4    27.183   19.650   60.408   1.000 26.77
ANISOU 26      CB   THR   4     2636     2429     5105      651   -988 -9 2 3
ATOM     27      OG1  THR   4    28.050   19.484   61.551   1.000 32.62
ANISOU 27      OG1  THR   4     3398     2812     6184      195  -2081 -1 1 3 4
ATOM     28      CG2  THR   4    26.429   20.942   60.663   1.000 26.40
ANISOU 28      CG2  THR   4     2373     2692     4967      533   -573 -1 5 7 0
ATOM     29      C    THR   4    25.325   18.577   59.097   1.000 21.64
ANISOU 29      C    THR   4     3090     2760     2374      368   -750 -2 0
ATOM     30      O    THR   4    25.738   18.264   57.980   1.000 21.58
ANISOU 30      O    THR   4     2668     2629     2902      246   -560 -6 5 9
ATOM     31      N    VAL   5    24.104   19.049   59.340   1.000 15.88
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ANISOU 31   N   VAL  5    2505    2021    1508    -613   -630 -162
ATOM   32   CA  VAL  5   23.211  19.385  58.211  1.000 14.80
ANISOU 32   CA  VAL  5    2463    1893    1266    -594   -473  -87
ATOM   33   CB  VAL  5   21.742  19.402  58.606  1.000 16.09
ANISOU 33   CB  VAL  5    2476    1881    1757    -412   -406 502
ATOM   34   CG1 VAL  5   20.855  19.846  57.447  1.000 14.91
ANISOU 34   CG1 VAL  5    2468    1859    1337       9   -102  197
ATOM   35   CG2 VAL  5   21.310  17.994  59.074  1.000 21.15
ANISOU 35   CG2 VAL  5    3015    2345    2677    -700   -418 1198
ATOM   36   C   VAL  5   23.639  20.762  57.694  1.000 17.70
ANISOU 36   C   VAL  5    2893    2085    1749   -1137   -713 103
ATOM   37   O   VAL  5   23.532  21.759  58.419  1.000 17.35
ANISOU 37   O   VAL  5    2566    1978    2050    -698   -650 105
ATOM   38   N   PRO  6   24.150  20.845  56.479  1.000 13.23
ANISOU 38   N   PRO  6    1334    1597    2097    -162   -668 409
ATOM   39   CD  PRO  6   24.302  19.770  55.484  1.000 15.56
ANISOU 39   CD  PRO  6    1887    1850    2176    -309   -383 277
ATOM   40   CA  PRO  6   24.667  22.137  56.005  1.000 14.49
ANISOU 40   CA  PRO  6    1332    1740    2432    -218   -536 522
ATOM   41   CB  PRO  6   25.571  21.722  54.847  1.000 18.21
ANISOU 41   CB  PRO  6    2294    1740    2886    -224    130 434
ATOM   42   CG  PRO  6   25.132  20.378  54.409  1.000 20.37
ANISOU 42   CG  PRO  6    2708    2632    2399   -1078     38  -61
ATOM   43   C   PRO  6   23.576  23.091  55.510  1.000 14.59
ANISOU 43   C   PRO  6    1388    1712    2443    -406   -786 698
ATOM   44   O   PRO  6   22.408  22.743  55.295  1.000 13.06
ANISOU 44   O   PRO  6    1298    1547    2118    -283   -596 1 5
ATOM   45   N   THR  7   24.048  24.326  55.313  1.000 14.56
ANISOU 45   N   THR  7    1393    1678    2463    -380   -565 587
ATOM   46   CA  THR  7   23.288  25.428  54.771  1.000 13.28
ANISOU 46   CA  THR  7    1463    1584    1998    -469   -734 440
ATOM   47   CB  THR  7   23.121  26.572  55.799  1.000 14.44
ANISOU 47   CB  THR  7    1927    1652    1905    -348  -1257 329
ATOM   48   OG1 THR  7   22.454  26.102  56.998  1.000 18.44
ANISOU 48   OG1 THR  7    3136    2013    1858    -333   -829 176
ATOM   49   CG2 THR  7   22.290  27.719  55.261  1.000 14.98
ANISOU 49   CG2 THR  7    1390    1788    2513    -213   -727 412
ATOM   50   C   THR  7   23.973  26.005  53.539  1.000 14.62
ANISOU 50   C   THR  7    1144    2200    2212    -355   -693 7 04
ATOM   51   O   THR  7   25.192  26.257  53.600  1.000 17.21
ANISOU 51   O   THR  7    1284    2515    2738    -641   -840 975
ATOM   52   N   PHE  8   23.211  26.222  52.472  1.000 12.32
ANISOU 52   N   PHE  8    1165    1596    1919    -314   -534 370
ATOM   53   CA  PHE  8   23.692  26.869  51.283  1.000 13.31
ANISOU 53   CA  PHE  8    1554    1531    1971     -60   -295 343
ATOM   54   CB  PHE  8   23.724  25.933  50.067  1.000 13.71
ANISOU 54   CB  PHE  8    1479    1705    2025    -136   -232 234
ATOM   55   CG  PHE  8   24.635  24.746  50.258  1.000 13.68
ANISOU 55   CG  PHE  8    1225    1716    2257    -185      8 155
ATOM   56   CD1 PHE  8   24.147  23.503  50.628  1.000 14.10
ANISOU 56   CD1 PHE  8    1317    1710    2329     -93    231 221
ATOM   57   CD2 PHE  8   26.006  24.882  50.079  1.000 17.52
ANISOU 57   CD2 PHE  8    1239    2282    3134    -234    -56 917
ATOM   58   CE1 PHE  8   24.984  22.420  50.812  1.000 15.39
ANISOU 58   CE1 PHE  8    1473    1878    2497     -11    242 481
ATOM   59   CE2 PHE  8   26.840  23.807  50.271  1.000 17.73
ANISOU 59   CE2 PHE  8    1179    2259    3301    -157   -143 423
ATOM   60   CZ  PHE  8   26.348  22.567  50.654  1.000 17.12
ANISOU 60   CZ  PHE  8    1310    2437    2757      24   -382 978
ATOM   61   C   PHE  8   22.821  28.073  50.909  1.000 12.76
ANISOU 61   C   PHE  8    1401    1513    1935    -164   -145 442
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ATOM     62   O   PHE  8    21.602  28.033  51.079  1.000 13.18
ANISOU   62   O   PHE  8     1392    1295    2322   -256  -400 364
ATOM     63   N   SER  9    23.478  29.096  50.394  1.000 13.03
ANISOU   63   N   SER  9     1722    1636    1593   -565  -601 490
ATOM     64   CA  SER  9    22.861  30.224  49.718  1.000 12.55
ANISOU   64   CA  SER  9     1591    1468    1708   -392  -438 315
ATOM     65   CB  SER  9    23.743  31.472  49.761  1.000 15.41
ANISOU   65   CB  SER  9     2385    1833    1637   -915 -1057 783
ATOM     66   OG  SER  9    23.138  32.539  49.007  1.000 17.99
ANISOU   66   OG  SER  9     2504    1721    2611   -718  -999 924
ATOM     67   C   SER  9    22.520  29.868  48.276  1.000 12.72
ANISOU   67   C   SER  9     2040    1187    1606   -411  -576 476
ATOM     68   O   SER  9    23.397  29.495  47.478  1.000 16.18
ANISOU   68   O   SER  9     2265    2053    1830   -465  -381 7 3
ATOM     69   N   LEU 10    21.229  29.982  47.968  1.000 14.19
ANISOU   69   N   LEU 10     2154    1488    1750   -301  -699 174
ATOM     70   CA  LEU 10    20.798  29.714  46.596  1.000 14.62
ANISOU   70   CA  LEU 10     2243    1579    1734   -184  -784 224
ATOM     71   CB  LEU 10    19.291  29.883  46.436  1.000 14.72
ANISOU   71   CB  LEU 10     2222    1714    1657   -142  -657 -168
ATOM     72   CG  LEU 10    18.693  29.633  45.050  1.000 14.10
ANISOU   72   CG  LEU 10     2087    1557    1713   -702  -695 145
ATOM     73   CD1 LEU 10    18.986  28.214  44.582  1.000 16.23
ANISOU   73   CD1 LEU 10     2994    1578    1595   -554 -1132 8 7
ATOM     74   CD2 LEU 10    17.198  29.913  44.997  1.000 21.82
ANISOU   74   CD2 LEU 10     2180    2904    3206   -421 -1151 -518
ATOM     75   C   LEU 10    21.531  30.639  45.626  1.000 15.87
ANISOU   75   C   LEU 10     2449    1785    1796   -491  -844 314
ATOM     76   O   LEU 10    21.962  30.199  44.553  1.000 16.33
ANISOU   76   O   LEU 10     2607    1816    1780   -601  -829 276
ATOM     77   N   ALA 11    21.669  31.917  45.986  1.000 17.17
ANISOU   77   N   ALA 11     2521    1889    2115   -607  -548 139
ATOM     78   CA  ALA 11    22.335  32.912  45.129  1.000 16.56
ANISOU   78   CA  ALA 11     2377    1884    2029   -732 -1033 3 0 2
ATOM     79   CB  ALA 11    22.199  34.259  45.805  1.000 20.05
ANISOU   79   CB  ALA 11     3210    1877    2529   -670  -674 259
ATOM     80   C   ALA 11    23.786  32.535  44.831  1.000 16.33
ANISOU   80   C   ALA 11     2319    2255    1629   -754  -988 4 3 4
ATOM     81   O   ALA 11    24.260  32.587  43.677  1.000 19.66
ANISOU   81   O   ALA 11     3115    2559    1795   -947  -560 619
ATOM     82   N   GLU 12    24.558  32.085  45.810  1.000 17.28
ANISOU   82   N   GLU 12     2686    1994    1884   -454 -1087 390
ATOM     83   CA  GLU 12    25.931  31.654  45.752  1.000 16.34
ANISOU   83   CA  GLU 12     2703    1674    1831   -474  -889 1033
ATOM     84   CB  GLU 12    26.527  31.477  47.158  1.000 16.09
ANISOU   84   CB  GLU 12     2440    1867    1808   -770  -820 1058
ATOM     85   CG  GLU 12    26.633  32.802  47.915  1.000 18.90
ANISOU   85   CG  GLU 12     2717    2127    2335  -1216 -1090 788
ATOM     86   CD  GLU 12    27.115  32.657  49.342  1.000 21.17
ANISOU   86   CD  GLU 12     3300    2547    2198  -1182 -1053 7 2 4
ATOM     87   OE1 GLU 12    27.538  31.558  49.756  1.000 22.07
ANISOU   87   OE1 GLU 12     2722    3014    2650   -720 -1365 797
ATOM     88   OE2 GLU 12    27.068  33.679  50.059  1.000 29.26
ANISOU   88   OE2 GLU 12     5764    2634    2722  -1279 -1848 476
ATOM     89   C   GLU 12    25.997  30.402  44.882  1.000 17.16
ANISOU   89   C   GLU 12     2044    2319    2158   -624  -715 481
ATOM     90   O   GLU 12    26.879  30.317  44.032  1.000 18.88
ANISOU   90   O   GLU 12     3200    2388    1583  -1004  -306 899
ATOM     91   N   LEU 13    25.083  29.441  45.049  1.000 17.32
ANISOU   91   N   LEU 13     2176    2300    2104   -659  -386 9 4
ATOM     92   CA  LEU 13    25.082  28.252  44.189  1.000 14.00
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ANISOU  92   CA  LEU  13   1734     1873     1713    -140   -170  4 9 8
ATOM    93   CB  LEU  13   24.003   27.248   44.620  1.000 15.37
ANISOU  93   CB  LEU  13   2205     1838     1795    -375   -149  4 6 5
ATOM    94   CG  LEU  13   24.154   26.554   45.967  1.000 14.52
ANISOU  94   CG  LEU  13   1913     1803     1799    -280   -204  4 4 2
ATOM    95   CD1 LEU  13   22.934   25.680   46.193  1.000 15.15
ANISOU  95   CD1 LEU  13   2174     1817     1766    -433    185   1 7 5
ATOM    96   CD2 LEU  13   25.411   25.690   46.067  1.000 17.54
ANISOU  96   CD2 LEU  13   2119     2043     2502    -38    -419  2 7 0
ATOM    97   C   LEU  13   24.876   28.626   42.725  1.000 16.54
ANISOU  97   C   LEU  13   2510     2062     1710    -222    -93   5 6 5
ATOM    98   O   LEU  13   25.548   28.122   41.821  1.000 18.28
ANISOU  98   O   LEU  13   2685     2514     1748    -687     75  2 5 9
ATOM    99   N   GLN  14   23.945   29.534   42.472  1.000 16.86
ANISOU  99   N   GLN  14   1970     2337     2100    -557   -683  8 3 8
ATOM   100   CA  GLN  14   23.657   30.015   41.132  1.000 18.63
ANISOU 100   CA  GLN  14   2761     2404     1915    -610   -802  5 6 8
ATOM   101   CB  GLN  14   22.421   30.923   41.130  1.000 19.39
ANISOU 101   CB  GLN  14   3166     2176     2025    -392   -918  9 7 7
ATOM   102   CG  GLN  14   21.108   30.250   41.460  1.000 19.00
ANISOU 102   CG  GLN  14   2879     2383     1957    -209   -725  4 6 0
ATOM   103   CD  GLN  14   19.974   31.227   41.766  1.000 18.83
ANISOU 103   CD  GLN  14   3139     2118     1897    -6  -1229  4 9 4
ATOM   104   OE1 GLN  14   20.177   32.317   42.314  1.000 26.10
ANISOU 104   OE1 GLN  14   3928     2407     3532    -98   -1172  - 2 4 1
ATOM   105   NE2 GLN  14   18.745   30.823   41.411  1.000 20.94
ANISOU 105   NE2 GLN  14   2900     2716     2340    -149   -840  4 5 4
ATOM   106   C   GLN  14   24.804   30.812   40.525  1.000 20.40
ANISOU 106   C   GLN  14   3226     2458     2065    -795   -712  9 3 7
ATOM   107   O   GLN  14   24.812   30.951   39.311  1.000 30.48
ANISOU 107   O   GLN  14   5089     4340     2152    -2337  -898  1 2 1 1
ATOM   108   N   GLN  15   25.734   31.309   41.329  1.000 20.35
ANISOU 108   N   GLN  15   3252     2452     2030    -1067  -240  4 9 7
ATOM   109   CA  GLN  15   26.909   32.041   40.884  1.000 21.88
ANISOU 109   CA  GLN  15   3184     3230     1901    -1152  -299  7 8 8
ATOM   110   CB  GLN  15   27.288   33.100   41.920  1.000 22.20
ANISOU 110   CB  GLN  15   2720     3162     2551    -1131  -770  6 9 1
ATOM   111   CG  GLN  15   26.450   34.358   41.954  1.000 25.73
ANISOU 111   CG  GLN  15   4496     2735     2545    -821   -233  1 2 6 9
ATOM   112   CD  GLN  15   26.325   35.021   43.306  1.000 35.76
ANISOU 112   CD  GLN  15   6010     3945     3631    -643   -229  - 1 3 5
ATOM   113   OE1 GLN  15   27.145   34.884   44.225  1.000 49.13
ANISOU 113   OE1 GLN  15   8425     5866     4378    -2857  -2197  - 5 6 4
ATOM   114   NE2 GLN  15   25.255   35.812   43.489  1.000 51.85
ANISOU 114   NE2 GLN  15   7190     5567     6945     62   3066   1 0 7
ATOM   115   C   GLN  15   28.069   31.079   40.625  1.000 23.93
ANISOU 115   C   GLN  15   3451     3513     2127    -990    145   8 8 4
ATOM   116   O   GLN  15   29.177   31.448   40.213  1.000 28.95
ANISOU 116   O   GLN  15   3535     4619     2845    -899    510   1 2 2 5
ATOM   117   N   GLY  16   27.828   29.794   40.891  1.000 25.86
ANISOU 117   N   GLY  16   4089     3282     2457    -889    -36   4 6 9
ATOM   118   CA  GLY  16   28.812   28.763   40.649  1.000 29.00
ANISOU 118   CA  GLY  16   4785     3562     2671    -677    765   2 5 5
ATOM   119   C   GLY  16   29.741   28.546   41.814  1.000 25.45
ANISOU 119   C   GLY  16   3427     3490     2754    -264   1422  6 7 3
ATOM   120   O   GLY  16   30.805   27.955   41.625  1.000 29.63
ANISOU 120   O   GLY  16   3925     3267     4068    -66    1997  5 2 3
ATOM   121   N   LEU  17   29.387   28.979   43.015  1.000 22.50
ANISOU 121   N   LEU  17   3266     2713     2569    -39    923   7 3 3
ATOM   122   CA  LEU  17   30.234   28.727   44.172  1.000 21.73
ANISOU 122   CA  LEU  17   2299     2931     3025    -282    867   7 4 8
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ATOM     123  CB  LEU  17    30.124  29.921  45.132  1.000 21.23
ANISOU   123  CB  LEU  17    2137    2858    3071    -620   669   7 1 1
ATOM     124  CG  LEU  17    30.354  31.274  44.431  1.000 26.12
ANISOU   124  CG  LEU  17    2708    2965    4253    -889  1342  9 3 1
ATOM     125  CD1 LEU  17    29.962  32.444  45.305  1.000 29.81
ANISOU   125  CD1 LEU  17    2515    2924    5885    -396   464   3 0 3
ATOM     126  CD2 LEU  17    31.808  31.350  43.974  1.000 32.84
ANISOU   126  CD2 LEU  17    2845    3703    5930    -281  1871 2 1 1 4
ATOM     127  C   LEU  17    29.886  27.456  44.936  1.000 19.36
ANISOU   127  C   LEU  17    2081    2819    2455    -239   545   5 8 0
ATOM     128  O   LEU  17    28.773  26.920  44.848  1.000 21.11
ANISOU   128  O   LEU  17    2284    3004    2734    -444   107   1 0 5 5
ATOM     129  N   HIS  18    30.838  26.952  45.706  1.000 21.02
ANISOU   129  N   HIS  18    2124    2752    3109    -314   193   4 9 1
ATOM     130  CA  HIS  18    30.678  25.814  46.615  1.000 18.11
ANISOU   130  CA  HIS  18    1569    2996    2315    -460   -28   3 6 1
ATOM     131  CB  HIS  18    29.655  26.149  47.702  1.000 21.25
ANISOU   131  CB  HIS  18    1731    3332    3010    -45    282   3 5 4
ATOM     132  CG  HIS  18    29.796  27.515  48.283  1.000 23.28
ANISOU   132  CG  HIS  18    2234    3612    2999    211    -46   - 2 0
ATOM     133  CD2 HIS  18    28.898  28.535  48.344  1.000 24.53
ANISOU   133  CD2 HIS  18    3112    3479    2728    532    41  4 4 0
ATOM     134  ND1 HIS  18    30.940  27.977  48.895  1.000 26.72
ANISOU   134  ND1 HIS  18    2938    4039    3173    -151   -569  3 8
ATOM     135  CE1 HIS  18    30.756  29.218  49.307  1.000 29.80
ANISOU   135  CE1 HIS  18    4476    3775    3071    -542   -562 2 3 7
ATOM     136  NE2 HIS  18    29.524  29.581  48.985  1.000 30.03
ANISOU   136  NE2 HIS  18    4752    3282    3377    216    -148 3 3 8
ATOM     137  C   HIS  18    30.266  24.528  45.917  1.000 18.57
ANISOU   137  C   HIS  18    1943    3084    2028    -951   30  5 9 0
ATOM     138  O   HIS  18    29.594  23.682  46.532  1.000 19.92
ANISOU   138  O   HIS  18    1949    3125    2493    -777   -87   9 9 5
ATOM     139  N   GLN  19    30.647  24.340  44.658  1.000 19.24
ANISOU   139  N   GLN  19    2329    2700    2282    -256   298   4 9 4
ATOM     140  CA  GLN  19    30.119  23.206  43.908  1.000 21.51
ANISOU   140  CA  GLN  19    3249    2431    2492    -228   597   3 1 8
ATOM     141  CB  GLN  19    30.446  23.307  42.406  1.000 22.89
ANISOU   141  CB  GLN  19    3231    3058    2408    -148   463   2 4 4
ATOM     142  CG  GLN  19    29.738  24.453  41.698  1.000 25.83
ANISOU   142  CG  GLN  19    3445    3712    2658    -384   -407 5 6 8
ATOM     143  CD  GLN  19    28.223  24.470  41.747  1.000 31.56
ANISOU   143  CD  GLN  19    3439    4722    3832    -252   -988 3 5 7
ATOM     144  OE1 GLN  19    27.521  23.640  41.153  1.000 38.51
ANISOU   144  OE1 GLN  19    3869    3649    7115    377    -3045 6 8 6
ATOM     145  NE2 GLN  19    27.621  25.433  42.475  1.000 33.32
ANISOU   145  NE2 GLN  19    3303    5695    3663    647    -1109 4 4 9
ATOM     146  C   GLN  19    30.578  21.873  44.485  1.000 20.32
ANISOU   146  C   GLN  19    2224    2710    2785    -60    514   3 9 4
ATOM     147  O   GLN  19    29.806  20.900  44.473  1.000 19.08
ANISOU   147  O   GLN  19    1888    2451    2910    221    257   7 4 3
ATOM     148  N   ASP  20    31.800  21.761  44.999  1.000 24.09
ANISOU   148  N   ASP  20    3001    3507    2645    -773   -507 4 1 5
ATOM     149  CA  ASP  20    32.268  20.498  45.553  1.000 21.82
ANISOU   149  CA  ASP  20    1707    3811    2774    -327   -58   3 5 7
ATOM     150  CB  ASP  20    33.780  20.527  45.779  1.000 26.34
ANISOU   150  CB  ASP  20    1594    4552    3863    -962   236   4 9 0
ATOM     151  CG  ASP  20    34.596  20.517  44.503  1.000 34.45
ANISOU   151  CG  ASP  20    2531    5859    4701    -1208  1213 - 2 8 0
ATOM     152  OD1 ASP  20    34.177  19.982  43.457  1.000 33.11
ANISOU   152  OD1 ASP  20    3768    4173    4640    -311   1233 - 3 7 5
ATOM     153  OD2 ASP  20    35.725  21.056  44.532  1.000 49.71
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ANISOU 153   OD2 ASP  20   3445      9922      5519     -3116 1710 5 3
ATOM   154   C   ASP  20   31.538 20.179 46.862 1.000 21.03
ANISOU 154   C   ASP  20   1876      2702      3412      -231  616  3 88
ATOM   155   O   ASP  20   31.118 19.038 47.075 1.000 20.80
ANISOU 155   O   ASP  20   1162      2583      4157       -72 -139 55 0
ATOM   156   N   GLU  21   31.359 21.177 47.729 1.000 17.88
ANISOU 156   N   GLU  21   1218      2751      2824      -263 -148 51 1
ATOM   157   CA  GLU  21   30.599 20.999 48.965 1.000 16.80
ANISOU 157   CA  GLU  21   1128      2173      3083       -96   46 394
ATOM   158   CB  GLU  21   30.654 22.304 49.781 1.000 20.23
ANISOU 158   CB  GLU  21   1366      2620      3701         5 -262 -210
ATOM   159   CG  GLU  21   32.040 22.669 50.307 1.000 24.60
ANISOU 159   CG  GLU  21   1660      3325      4359      -221 -654 -3 01
ATOM   160   CD  GLU  21   32.860 23.565 49.402 1.000 28.46
ANISOU 160   CD  GLU  21   1191      4348      5275      -498 -1597 1125
ATOM   161   OE1 GLU  21   33.751 24.294 49.919 1.000 31.17
ANISOU 161   OE1 GLU  21   2360      4428      5057     -1033 -1094 349
ATOM   162   OE2 GLU  21   32.664 23.590 48.171 1.000 31.16
ANISOU 162   OE2 GLU  21   2734      3901      5203     -1519 -1565 1123
ATOM   163   C   GLU  21   29.159 20.594 48.689 1.000 16.44
ANISOU 163   C   GLU  21   1271      2295      2679      -165  -53  430
ATOM   164   O   GLU  21   28.599 19.700 49.329 1.000 14.30
ANISOU 164   O   GLU  21   1271      2257      1907      -417 -301 3 6
ATOM   165   N   PHE  22   28.548 21.257 47.708 1.000 16.14
ANISOU 165   N   PHE  22   1440      2441      2253      -316  -28  3 28
ATOM   166   CA  PHE  22   27.155 20.947 47.327 1.000 15.36
ANISOU 166   CA  PHE  22   1530      2012      2294      -262 -173 2 81
ATOM   167   CB  PHE  22   26.612 21.967 46.343 1.000 15.43
ANISOU 167   CB  PHE  22   1863      2056      1944      -316 -247 1 84
ATOM   168   CG  PHE  22   25.119 21.932 46.077 1.000 15.59
ANISOU 168   CG  PHE  22   1822      2141      1962      -299 -170 5 61
ATOM   169   CD1 PHE  22   24.218 21.987 47.129 1.000 17.03
ANISOU 169   CD1 PHE  22   1923      2605      1943      -410 -162 - 4 0
ATOM   170   CD2 PHE  22   24.606 21.856 44.797 1.000 14.84
ANISOU 170   CD2 PHE  22   1541      2083      2013        51  -94  - 155
ATOM   171   CE1 PHE  22   22.861 21.938 46.906 1.000 15.96
ANISOU 171   CE1 PHE  22   1844      1805      2414      -159  -64  1 76
ATOM   172   CE2 PHE  22   23.243 21.797 44.551 1.000 15.81
ANISOU 172   CE2 PHE  22   1600      1993      2416      -261 -190 -1 76
ATOM   173   CZ  PHE  22   22.360 21.853 45.612 1.000 14.18
ANISOU 173   CZ  PHE  22   1427      1430      2531      -105 -164 3 25
ATOM   174   C   PHE  22   27.049 19.515 46.792 1.000 16.23
ANISOU 174   C   PHE  22   1325      2042      2797      -110  164  1 02
ATOM   175   O   PHE  22   26.183 18.751 47.229 1.000 13.24
ANISOU 175   O   PHE  22   1411      1743      1876       105 -194 3 91
ATOM   176   N   ARG  23   27.888 19.097 45.853 1.000 15.45
ANISOU 176   N   ARG  23   1585      2313      1971      -167  -80  2 89
ATOM   177   CA  ARG  23   27.865 17.746 45.325 1.000 15.49
ANISOU 177   CA  ARG  23   809 2443      2634        50   -41  - 22
ATOM   178   CB  ARG  23   28.928 17.539 44.248 1.000 17.81
ANISOU 178   CB  ARG  23   966 3142      2658      -128   43  -167
ATOM   179   CG  ARG  23   28.470 17.928 42.860 1.000 25.86
ANISOU 179   CG  ARG  23   2719      4636      2470      -758 -176 - 49
ATOM   180   CD  ARG  23   29.485 17.370 41.867 1.000 34.68
ANISOU 180   CD  ARG  23   5148      4847      3183     -1532 1634 -548
ATOM   181   NE  ARG  23   30.660 18.253 41.877 1.000 31.13
ANISOU 181   NE  ARG  23   2799      4194      4836       305  747  6 6
ATOM   182   CZ  ARG  23   30.703 19.424 41.244 1.000 34.24
ANISOU 182   CZ  ARG  23   2749      4844      5418      -757  239  7 64
ATOM   183   NH1 ARG  23   29.647 19.856 40.551 1.000 28.06
ANISOU 183   NH1 ARG  23   2714      3685      4263      -721  555  1 81
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ATOM    184   NH2 ARG   23   31.830  20.114  41.340 1.000 36.08
ANISOU  184   NH2 ARG   23   2261    5328    6121   -562   776  - 8 6
ATOM    185   C   ARG   23   28.045  16.713  46.420 1.000 15.06
ANISOU  185   C   ARG   23   1071    2061    2589    167   -32  -2 3 4
ATOM    186   O   ARG   23   27.335  15.687  46.410 1.000 16.28
ANISOU  186   O   ARG   23   1443    2244    2497   -118   -71  -2 7 7
ATOM    187   N   ARG   24   28.952  16.988  47.353 1.000 15.27
ANISOU  187   N   ARG   24   1024    2156    2623    -52   -21   2 9
ATOM    188   CA  ARG   24   29.193  16.003  48.430 1.000 17.70
ANISOU  188   CA  ARG   24   1443    2589    2693    275    -2 2 1 5
ATOM    189   CB  ARG   24   30.466  16.422  49.148 1.000 21.11
ANISOU  189   CB  ARG   24   1244    3486    3289    484   -257 3 8 4
ATOM    190   CG  ARG   24   31.787  16.217  48.429 1.000 30.46
ANISOU  190   CG  ARG   24   1438    5078    5057    426    441   3 0 8
ATOM    191   CD  ARG   24   32.979  16.537  49.330 1.000 33.50
ANISOU  191   CD  ARG   24   1163    5831    5736    208    370   4 5 8
ATOM    192   NE  ARG   24   33.636  17.804  49.071 1.000 51.46
ANISOU  192   NE  ARG   24   5800    7316    6437   -2596 -1688 1165
ATOM    193   CZ  ARG   24   33.973  18.776  49.903 1.000 46.72
ANISOU  193   CZ  ARG   24   4738    6888    6124   -1719 -1822 1316
ATOM    194   NH1 ARG   24   33.731  18.728  51.213 1.000 44.24
ANISOU  194   NH1 ARG   24   2650    6998    7160   -392   1001 8 4
ATOM    195   NH2 ARG   24   34.579  19.871  49.448 1.000 42.82
ANISOU  195   NH2 ARG   24   5339    4428    6503    513   -991 1216
ATOM    196   C   ARG   24   27.972  15.887  49.334 1.000 17.16
ANISOU  196   C   ARG   24   1549    2071    2900    129    140   2 9 5
ATOM    197   O   ARG   24   27.536  14.779  49.713 1.000 15.38
ANISOU  197   O   ARG   24  -1706    1890    2247     72  -388   1 0 4
ATOM    198   N   CYS   25   27.355  17.011  49.696 1.000 12.91
ANISOU  198   N   CYS   25   907 1824         2176   -254  -386   1 5 1
ATOM    199   CA  CYS   25   26.105  17.040  50.454 1.000 12.45
ANISOU  199   CA  CYS   25   942 1838         1949   -178  -480   8 1
ATOM    200   CB  CYS   25   25.660  18.491  50.697 1.000 11.67
ANISOU  200   CB  CYS   25   1150    1759    1527   -136   -604 1 8 4
ATOM    201   SG  CYS   25   23.973  18.580  51.425 1.000 14.90
ANISOU  201   SG  CYS   25   1465    1593    2602   -164   -26  - 1 8
ATOM    202   C   CYS   25   25.001  16.225  49.769 1.000 11.67
ANISOU  202   C   CYS   25   893 1897         1645   -283   -64  - 8 6
ATOM    203   O   CYS   25   24.360  15.377  50.390 1.000 12.73
ANISOU  203   O   CYS   25   1347    1426    2064   -233   -196 1 2 3
ATOM    204   N   LEU   26   24.798  16.461  48.470 1.000 11.70
ANISOU  204   N   LEU   26   1102    1530    1814   -128   -390 1
ATOM    205   CA  LEU   26   23.766  15.716  47.735 1.000 11.11
ANISOU  205   CA  LEU   26   1190    1476    1556   -238   -79  - 1 9 4
ATOM    206   CB  LEU   26   23.674  16.198  46.285 1.000 11.54
ANISOU  206   CB  LEU   26   1345    1522    1518    -75   -84  - 2 0 2
ATOM    207   CG  LEU   26   23.242  17.638  46.019 1.000 12.42
ANISOU  207   CG  LEU   26   1199    1542    1978   -153   -167 - 4 0
ATOM    208   CD1 LEU   26   23.414  17.993  44.539 1.000 14.77
ANISOU  208   CD1 LEU   26   1428    1916    2270     43 131 4 0 1
ATOM    209   CD2 LEU   26   21.814  17.885  46.466 1.000 14.45
ANISOU  209   CD2 LEU   26   1384    2061    2047    264   -32   3 2 1
ATOM    210   C   LEU   26   23.979  14.209  47.780 1.000 12.93
ANISOU  210   C   LEU   26   1360    1542    2011   -121   -486 - 1 0 7
ATOM    211   O   LEU   26   23.011  13.461  48.008 1.000 13.78
ANISOU  211   O   LEU   26   1660    1450    2125   -305   -426 - 5 1
ATOM    212   N   ARG   27   25.196  13.721  47.576 1.000 14.09
ANISOU  212   N   ARG   27   1518    1729    2108    151   -530 - 1 0 5
ATOM    213   CA  ARG   27   25.491  12.283  47.574 1.000 15.39
ANISOU  213   CA  ARG   27   2260    1690    1897    186    141  - 3 5 4
ATOM    214   CB  ARG   27   26.846  12.122  46.900 1.000 17.04
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ANISOU 214   CB  ARG  27    2259    2356    1861     517    49 -248
ATOM   215   CG  ARG  27   27.502  10.780  46.801  1.000 25.08
ANISOU 215   CG  ARG  27    3110    2837    3583    1105   606  -399
ATOM   216   CD  ARG  27   28.995  10.992  46.457  1.000 30.32
ANISOU 216   CD  ARG  27    2976    3836    4710    1190   720 -1381
ATOM   217   NE  ARG  27   29.818  11.407  47.581  1.000 36.51
ANISOU 217   NE  ARG  27    3633    4937    5301     121   391 -1429
ATOM   218   CZ  ARG  27   30.988  12.019  47.560  1.000 38.07
ANISOU 218   CZ  ARG  27    3334    5192    5941     364   661 -1776
ATOM   219   NH1 ARG  27   31.565  12.340  46.401  1.000 48.56
ANISOU 219   NH1 ARG  27    4482    7688    6280   -1305   736 -1326
ATOM   220   NH2 ARG  27   31.606  12.328  48.701  1.000 40.23
ANISOU 220   NH2 ARG  27    2891    6127    6266     457   717 -2463
ATOM   221   C   ARG  27   25.479  11.630  48.949  1.000 14.66
ANISOU 221   C   ARG  27    1720    1617    2233     135   -33   -42
ATOM   222   O   ARG  27   24.968  10.499  49.072  1.000 17.44
ANISOU 222   O   ARG  27    1981    1533    3114      98  -394   155
ATOM   223   N   ASP  28   26.031  12.308  49.973  1.000 13.72
ANISOU 223   N   ASP  28    1703    1366    2146     317  -327  319
ATOM   224   CA  ASP  28   26.227  11.701  51.277  1.000 15.33
ANISOU 224   CA  ASP  28    1886    1704    2234     538  -247  391
ATOM   225   CB  ASP  28   27.541  12.280  51.842  1.000 18.31
ANISOU 225   CB  ASP  28    2092    2709    2155     186  -465  544
ATOM   226   CG  ASP  28   28.785  11.875  51.083  1.000 23.06
ANISOU 226   CG  ASP  28    2002    3583    3176     -96   -50  478
ATOM   227   OD1 ASP  28   28.741  10.904  50.290  1.000 25.09
ANISOU 227   OD1 ASP  28    2515    2855    4163     830   406  440
ATOM   228   OD2 ASP  28   29.831  12.528  51.283  1.000 30.05
ANISOU 228   OD2 ASP  28    1919    4262    5236    -216  -695 1058
ATOM   229   C   ASP  28   25.092  11.910  52.267  1.000 14.90
ANISOU 229   C   ASP  28    2071    1435    2154     411  -203  217
ATOM   230   O   ASP  28   24.967  11.093  53.200  1.000 14.50
ANISOU 230   O   ASP  28    1878    1501    2132     444  -265  179
ATOM   231   N   LYS  29   24.317  12.975  52.096  1.000 12.90
ANISOU 231   N   LYS  29    1487    1290    2126      77  -276  136
ATOM   232   CA  LYS  29   23.265  13.368  53.029  1.000 12.95
ANISOU 232   CA  LYS  29    1369    1649    1904       8  -390   14
ATOM   233   CB  LYS  29   23.699  14.653  53.763  1.000 12.71
ANISOU 233   CB  LYS  29    1105    1581    2145     209  -359  -30
ATOM   234   CG  LYS  29   25.016  14.504  54.518  1.000 16.11
ANISOU 234   CG  LYS  29    1413    1998    2711      21  -818 -161
ATOM   235   CD  LYS  29   25.449  15.727  55.309  1.000 18.24
ANISOU 235   CD  LYS  29    2500    1989    2442     -47 -1140  -14
ATOM   236   CE  LYS  29   26.789  15.445  56.002  1.000 19.36
ANISOU 236   CE  LYS  29    2038    3171    2148     -90  -822 -725
ATOM   237   NZ  LYS  29   27.515  16.696  56.351  1.000 26.61
ANISOU 237   NZ  LYS  29    2592    3146    4373    -309 -1571 -353
ATOM   238   C   LYS  29   21.888  13.550  52.386  1.000 11.62
ANISOU 238   C   LYS  29    1432    1153    1831      52  -290   24
ATOM   239   O   LYS  29   20.877  13.028  52.880  1.000 12.57
ANISOU 239   O   LYS  29    1426    1556    1792     -97  -282  100
ATOM   240   N   GLY  30   21.779  14.280  51.284  1.000 11.98
ANISOU 240   N   GLY  30    1359    1454    1741      -5  -310   78
ATOM   241   CA  GLY  30   20.510  14.478  50.562  1.000 10.93
ANISOU 241   CA  GLY  30    1192    1497    1465    -158  -116  -18
ATOM   242   C   GLY  30   19.544  15.433  51.242  1.000 11.15
ANISOU 242   C   GLY  30    1137    1143    1955    -260  -154 -131
ATOM   243   O   GLY  30   18.337  15.374  50.963  1.000 11.26
ANISOU 243   O   GLY  30    1247    1082    1949     -56  -419  104
ATOM   244   N   LEU  31   20.064  16.278  52.129  1.000 10.54
ANISOU 244   N   LEU  31    1292     894    1821     -98  -367   89
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ATOM    245  CA  LEU  31   19.272  17.324  52.803  1.000 11.07
ANISOU  245  CA  LEU  31   1345   1111   1752     46 -520  - 3 3
ATOM    246  CB  LEU  31   18.465  16.777  53.975  1.000 14.44
ANISOU  246  CB  LEU  31   1753   1671   2062    -284  -80  -1 7 8
ATOM    247  CG  LEU  31   19.113  16.629  55.333  1.000 17.74
ANISOU  247  CG  LEU  31   2456   2220   2064    -172  -115 4 9 9
ATOM    248  CD1 LEU  31   18.220  15.978  56.371  1.000 26.19
ANISOU  248  CD1 LEU  31   2716   4691   2543   -1224 -213 1 0 1 6
ATOM    249  CD2 LEU  31   20.388  15.821  55.182  1.000 22.77
ANISOU  249  CD2 LEU  31   3121   2633   2899     650  -18 1 4 8 7
ATOM    250  C   LEU  31   20.176  18.498  53.195  1.000 10.95
ANISOU  250  C   LEU  31   1041   1129   1989     180 -318 - 2 2 3
ATOM    251  O   LEU  31   21.376  18.314  53.424  1.000 10.89
ANISOU  251  O   LEU  31   1015   1171   1952      69 -160  2 0 4
ATOM    252  N   PHE  32   19.570  19.688  53.219  1.000 11.42
ANISOU  252  N   PHE  32   1134    995  2211      75 -273  6 5
ATOM    253  CA  PHE  32   20.280  20.916  53.545  1.000 10.33
ANISOU  253  CA  PHE  32   1071   1152   1703     -57  -288 - 3 3
ATOM    254  CB  PHE  32   21.244  21.307  52.422  1.000 12.25
ANISOU  254  CB  PHE  32   1054   1729   1872    -113  -173 -  5
ATOM    255  CG  PHE  32   20.624  21.346  51.041  1.000 11.94
ANISOU  255  CG  PHE  32   1158   1572   1809    -281  -148 1 2 2
ATOM    256  CD1 PHE  32   20.522  20.188  50.270  1.000 11.12
ANISOU  256  CD1 PHE  32   1070   1308   1846    -182  -458 3 1 8
ATOM    257  CD2 PHE  32   20.145  22.528  50.513  1.000 12.14
ANISOU  257  CD2 PHE  32   1618   1353   1639    -300  -185 - 4 7
ATOM    258  CE1 PHE  32   19.943  20.212  49.015  1.000 12.00
ANISOU  258  CE1 PHE  32   1342   1377   1840    -301  -468 3 3 2
ATOM    259  CE2 PHE  32   19.553  22.534  49.266  1.000 12.79
ANISOU  259  CE2 PHE  32   1858   1543   1457     -86   -34  2 8
ATOM    260  CZ  PHE  32   19.416  21.376  48.503  1.000 11.50
ANISOU  260  CZ  PHE  32   1623   1414   1331     -76  -272 2 1 7
ATOM    261  C   PHE  32   19.310  22.071  53.762  1.000 9.82
ANISOU  261  C   PHE  32   1015   1042   1674    -120  -367 - 7 7
ATOM    262  O   PHE  32   18.165  21.990  53.285  1.000 11.29
ANISOU  262  O   PHE  32   1097   1286   1906     -95  -495 - 7 7
ATOM    263  N   TYR  33   19.736  23.099  54.493  1.000 12.68
ANISOU  263  N   TYR  33   1606   1053   2158     -57  -766 -1 5 9
ATOM    264  CA  TYR  33   18.945  24.335  54.607  1.000 10.64
ANISOU  264  CA  TYR  33   1491   1173   1380     -77   -97  - 1 3 2
ATOM    265  CB  TYR  33   19.141  25.022  55.955  1.000 10.85
ANISOU  265  CB  TYR  33.  1019   1725   1379    -260  -224 -1 6 4
ATOM    266  CG  TYR  33   18.545  24.331  57.156  1.000 10.71
ANISOU  266  CG  TYR  33   1173   1552   1342     -45  -230 -1 1 7
ATOM    267  CD1 TYR  33   17.266  24.643  57.619  1.000 11.64
ANISOU  267  CD1 TYR  33   1385   1441   1596     -68   83  - 9 4
ATOM    268  CE1 TYR  33   16.694  24.023  58.719  1.000 13.60
ANISOU  268  CE1 TYR  33   1879   1483   1804    -147  339  - 2 6
ATOM    269  CD2 TYR  33   19.273  23.364  57.853  1.000 14.04
ANISOU  269  CD2 TYR  33   1604   2040   1689     132  -509 1 2 7
ATOM    270  CE2 TYR  33   18.711  22.752  58.964  1.000 15.75
ANISOU  270  CE2 TYR  33   1872   2227   1886    -187  -701 4 3 3
ATOM    271  CZ  TYR  33   17.438  23.078  59.387  1.000 16.02
ANISOU  271  CZ  TYR  33   2205   1939   1942    -332  -154 3 0 0
ATOM    272  OH  TYR  33   16.919  22.454  60.504  1.000 19.95
ANISOU  272  OH  TYR  33   3412   2154   2015     -60  278  4 0 0
ATOM    273  C   TYR  33   19.357  25.253  53.452  1.000 10.92
ANISOU  273  C   TYR  33   1249   1448   1453    -125  -271 1 4 9
ATOM    274  O   TYR  33   20.514  25.192  53.006  1.000 11.50
ANISOU  274  O   TYR  33   1204   1375   1791     -98  -270 2 8 1
ATOM    275  N   LEU  34   18.399  26.049  53.000  1.000 11.28
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ANISOU 275    N   LEU  34   1159    1265    1862    -210   -149 121
ATOM   276    CA  LEU  34   18.577  26.942  51.864  1.000  12.99
ANISOU 276    CA  LEU  34   1565    1444    1926      81  -478. 2 74
ATOM   277    CB  LEU  34   17.757  26.420  50.682  1.000  13.96
ANISOU 277    CB  LEU  34   2007    1301    1995    -430   -459 321
ATOM   278    CG  LEU  34   17.990  27.112  49.334  1.000  13.81
ANISOU 278    CG  LEU  34   2085    1322    1839    -331   -365 198
ATOM   279    CD1 LEU  34   19.308  26.691  48.704  1.000  15.94
ANISOU 279    CD1 LEU  34   2123    1793    2140     -10   -313 607
ATOM   280    CD2 LEU  34   16.818  26.799  48.411  1.000  16.36
ANISOU 280    CD2 LEU  34   2186    1837    2193     122   -721 1 3 4
ATOM   281    C   LEU  34   18.195  28.361  52.241  1.000  13.03
ANISOU 281    C   LEU  34   1676    1418    1857      31  -643  2 1 8
ATOM   282    O   LEU  34   17.055  28.647  52.595  1.000  13.99
ANISOU 282    O   LEU  34   1690    1281    2344     140   -714 8 5
ATOM   283    N   THR  35   19.148  29.283  52.175  1.000  15.03
ANISOU 283    N   THR  35   1837    1584    2288    -118   -625 - 3
ATOM   284    CA  THR  35   18.918  30.704  52.369  1.000  14.80
ANISOU 284    CA  THR  35   1866    1560    2196    -169   -175 - 1 4 4
ATOM   285    CB  THR  35   20.013  31.366  53.232  1.000  15.65
ANISOU 285    CB  THR  35   2025    1719    2202    -149   -204 - 2 8 1
ATOM   286    OG1 THR  35   21.276  31.115  52.601  1.000  18.81
ANISOU 286    OG1 THR  35   1885    2679    2583    -279   -229 - 7 2 8
ATOM   287    CG2 THR  35   20.138  30.811  54.622  1.000  18.84
ANISOU 287    CG2 THR  35   2523    2207    2427    -850   -510 1 5 5
ATOM   288    C   THR  35   18.915  31.456  51.043  1.000  15.07
ANISOU 288    C   THR  35   1904    1473    2348     -57   -283 - 7 0
ATOM   289    O   THR  35   19.209  30.909  49.973  1.000  15.00
ANISOU 289    O   THR  35   2034    1520    2145    -215   -372 8 9
ATOM   290    N   ASP  36   18.564  32.739  51.086  1.000  17.46
ANISOU 290    N   ASP  36   2302    1366    2968    -209   -766 - 1 2 0
ATOM   291    CA  ASP  36   18.618  33.606  49.924  1.000  17.91
ANISOU 291    CA  ASP  36   2150    1592    3063     112   -660 8 6
ATOM   292    CB  ASP  36   20.063  33.845  49.471  1.000  17.91
ANISOU 292    CB  ASP  36   2153    1584    3067      84  -587  - 4 2
ATOM   293    CG  ASP  36   20.948  34.545  50.469  1.000  19.23
ANISOU 293    CG  ASP  36   2575    2160    2571    -642   -324 181
ATOM   294    OD1 ASP  36   20.426  35.304  51.325  1.000  24.17
ANISOU 294    OD1 ASP  36   2843    3055    3284     152  -1013 - 6 5 2
ATOM   295    OD2 ASP  36   22.199  34.355  50.412  1.000  21.00
ANISOU 295    OD2 ASP  36   2637    2571    2772    -382   -834 - 3 9 3
ATOM   296    C   ASP  36   17.783  33.038  48.784  1.000  18.20
ANISOU 296    C   ASP  36   2402    1736    2779    -446   -390 191
ATOM   297    O   ASP  36   18.222  33.063  47.629  1.000  18.98
ANISOU 297    O   ASP  36   2127    2022    3062    -464   -60  - 2 5 2
ATOM   298    N   CYS  37   16.593  32.547  49.077  1.000  17.22
ANISOU 298    N   CYS  37   1873    2190    2479      63  -350  - 1
ATOM   299    CA  CYS  37   15.730  31.945  48.043  1.000  15.98
ANISOU 299    CA  CYS  37   1997    1590    2485     -81   -65   - 1 8 4
ATOM   300    CB  CYS  37   15.621  30.423  48.252  1.000  18.87
ANISOU 300    CB  CYS  37   2112    1790    3268    -114   -405 570
ATOM   301    SG  CYS  37   14.753  29.917  49.759  1.000  19.42
ANISOU 301    SG  CYS  37   2532    1683    3164     -74   -230 322
ATOM   302    C   CYS  37   14.349  32.580  47.958  1.000  16.12
ANISOU 302    C   CYS  37   1992    1669    2465    -175   -504 1 6
ATOM   303    O   CYS  37   13.483  32.032  47.253  1.000  20.60
ANISOU 303    O   CYS  37   2761    1769    3296    -241  -1333 5 1
ATOM   304    N   GLY  38   14.125  33.714  48.617  1.000  17.89
ANISOU 304    N   GLY  38   1847    1572    3381     209   -898 - 1 1 1
ATOM   305    CA  GLY  38   12.850  34.404  48.587  1.000  18.16
ANISOU 305    CA  GLY  38   1608    2126    3164     141   -999 - 6
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ATOM    306   C    GLY  38   11.843  33.864  49.589  1.000 21.98
ANISOU  306   C    GLY  38   2598    2574    3180     262    -97  -455
ATOM    307   O    GLY  38   10.677  34.273  49.499  1.000 22.75
ANISOU  307   O    GLY  38   2542    3027    3073     241    79   -97
ATOM    308   N    LEU  39   12.241  32.982  50.501  1.000 21.93
ANISOU  308   N    LEU  39   2112    3318    2903    -65    -102 -154
ATOM    309   CA   LEU  39   11.443  32.357  51.545  1.000 26.16
ANISOU  309   CA   LEU  39   3141    3610    3188    -1071  162  -400
ATOM    310   CB   LEU  39   11.220  30.868  51.277  1.000 28.13
ANISOU  310   CB   LEU  39   2980    3192    4516    -352   -848 258
ATOM    311   CG   LEU  39   10.296  30.434  50.157  1.000 27.39
ANISOU  311   CG   LEU  39   3352    2591    4463     541   -637 -1052
ATOM    312   CD1  LEU  39   10.472  28.940  49.910  1.000 28.66
ANISOU  312   CD1  LEU  39   3375    2293    5221     581   -150 -190
ATOM    313   CD2  LEU  39   8.838   30.768  50.478  1.000 30.62
ANISOU  313   CD2  LEU  39   3155    2985    5496     1275  -1485 -208
ATOM    314   C    LEU  39   12.060  32.430  52.949  1.000 26.26
ANISOU  314   C    LEU  39   2868    3969    3143    -796   170  335
ATOM    315   O    LEU  39   13.105  31.861  53.266  1.000 35.57
ANISOU  315   O    LEU  39   4990    4057    4470     804   -630 320
ATOM    316   N    THR  40   11.388  33.136  53.827  1.000 26.61
ANISOU  316   N    THR  40   3425    3883    2803    -703   -191 102
ATOM    317   CA   THR  40   11.676  33.329  55.228  1.000 22.95
ANISOU  317   CA   THR  40   1972    3864    2886     4     -608 518
ATOM    318   C    THR  40   10.380  33.424  56.031  1.000 27.03
ANISOU  318   C    THR  40   2331    4900    3040    -690   -220 -3
ATOM    319   O    THR  40   9.254   33.316  55.537  1.000 25.98
ANISOU  319   O    THR  40   2148    4860    2864    -546   36   -720
ATOM    320   CB   THR  40   12.476  34.624  55.456  1.000 27.16
ANISOU  320   CB   THR  40   2646    4799    2874    -932   -391 148
ATOM    321   OG1  THR  40   11.639  35.687  54.986  1.000 36.24
ANISOU  321   OG1  THR  40   5158    3872    4740    -472   -136 660
ATOM    322   CG2  THR  40   13.771  34.669  54.659  1.000 34.29
ANISOU  322   CG2  THR  40   5268    3289    4470    -1303  2206 429
ATOM    323   N    ASP  41   10.524  33.635  57.346  1.000 28.20
ANISOU  323   N    ASP  41   2270    5223    3223    -711   -317 -479
ATOM    324   CA   ASP  41   9.324   33.604  58.191  1.000 25.10
ANISOU  324   CA   ASP  41   1935    4633    2968     13    -551 -505
ATOM    325   C    ASP  41   8.418   34.785  57.896  1.000 24.69
ANISOU  325   C    ASP  41   2686    3839    2855    -446   -749 -241
ATOM    326   O    ASP  41   7.219   34.846  58.163  1.000 24.79
ANISOU  326   O    ASP  41   2757    2721    3941     174   -584 -141
ATOM    327   CB   ASP  41   9.728   33.549  59.678  1.000 28.21
ANISOU  327   CB   ASP  41   2221    5503    2995     892   -594 -555
ATOM    328   CG   ASP  41   9.892   32.129  60.180  1.000 42.46
ANISOU  328   CG   ASP  41   6437    5911    3784    -1196  -1257 826
ATOM    329   OD1  ASP  41   9.705   31.161  59.401  1.000 55.96
ANISOU  329   OD1  ASP  41   12184   5138    3940    -2654  -82  1249
ATOM    330   OD2  ASP  41   10.214  31.951  61.383  1.000 61.55
ANISOU  330   OD2  ASP  41   10370   7470    5548    -4396  -4720 2309
ATOM    331   N    THR  42   8.991   35.807  57.305  1.000 29.30
ANISOU  331   N    THR  42   3761    4531    2839    -1404  -1089 -72
ATOM    332   CA   THR  42   8.255   36.976  56.863  1.000 33.69
ANISOU  332   CA   THR  42   4852    3472    4475    -1524  -819 -127
ATOM    333   C    THR  42   7.199   36.598  55.834  1.000 29.14
ANISOU  333   C    THR  42   3354    3051    4667     204   -648 -277
ATOM    334   O    THR  42   6.026   36.969  55.844  1.000 36.90
ANISOU  334   O    THR  42   3578    2980    7462     603   -176 643
ATOM    335   CB   THR  42   9.282   37.967  56.281  1.000 40.80
ANISOU  335   CB   THR  42   5831    4318    5354    -2254  -450 37
ATOM    336   OG1  THR  42   10.288  38.317  57.263  1.000 46.30
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ANISOU 336   OG1 THR  42   6998     3682     6912    -3163 -1478  177
ATOM   337   CG2 THR  42   8.582   39.253   55.872   1.000 45.59
ANISOU 337   CG2 THR  42   9083     3877     4363    -2166 -1048  238
ATOM   338   N   GLU  43   7.573   35.773   54.862   1.000 31.74
ANISOU 338   N   GLU  43   3380     4360     4319    -673  -223  -782
ATOM   339   CA  GLU  43   6.647   35.355   53.810   1.000 35.40
ANISOU 339   CA  GLU  43   4856     4683     3913    -1510 -860  329
ATOM   340   C   GLU  43   5.643   34.324   54.330   1.000 28.03
ANISOU 340   C   GLU  43   2988     3297     4363    -41   -919  168
ATOM   341   O   GLU  43   4.560   34.138   53.764   1.000 38.18
ANISOU 341   O   GLU  43   3818     2970     7717    -66   -2774 1469
ATOM   342   CB  GLU  43   7.423   34.811   52.608   1.000 38.89
ANISOU 342   CB  GLU  43   4464     6532     3779    -2546 -860  -393
ATOM   343   CG  GLU  43   8.462   35.745   52.010   1.000 45.47
ANISOU 343   CG  GLU  43   5175     7105     5377    -2936 -92   -289
ATOM   344   CD  GLU  43   9.750   35.764   52.826   1.000 46.40
ANISOU 344   CD  GLU  43   4506     7977     5145    -3155 548   -1210
ATOM   345   OE1 GLU  43   9.775   36.447   53.880   1.000 55.20
ANISOU 345   OE1 GLU  43   8741     7607     4627    -2062 -1002 -669
ATOM   346   OE2 GLU  43  10.706   35.080   52.433   1.000 56.77
ANISOU 346   OE2 GLU  43   4592     8930     8050    -2652 939   -1258
ATOM   347   N   LEU  44   5.980   33.645   55.426   1.000 22.72
ANISOU 347   N   LEU  44   2508     2161     3964    464   -476  -450
ATOM   348   CA  LEU  44   5.117   32.592   55.959   1.000 26.76
ANISOU 348   CA  LEU  44   4009     1973     4187    140   570   -986
ATOM   349   CB  LEU  44   5.978   31.585   56.727   1.000 28.25
ANISOU 349   CB  LEU  44   5094     2194     3448    -153  277   -562
ATOM   350   CG  LEU  44   5.284   30.494   57.533   1.000 32.03
ANISOU 350   CG  LEU  44   5971     2801     3398    -279  1192  -627
ATOM   351   CD1 LEU  44   4.485   29.535   56.656   1.000 37.95
ANISOU 351   CD1 LEU  44   7665     2239     4514    -1148 2039  -1403
ATOM   352   CD2 LEU  44   6.302   29.703   58.361   1.000 36.97
ANISOU 352   CD2 LEU  44   7096     2869     4080    1150  2171  186
ATOM   353   C   LEU  44   4.000   33.145   56.841   1.000 31.10
ANISOU 353   C   LEU  44   3835     3182     4800    -700  837   -2205
ATOM   354   O   LEU  44   2.913   32.543   56.867   1.000 30.19
ANISOU 354   O   LEU  44   4402     3299     3768    -1248 870   -2165
ATOM   355   N   ALA  45   4.238   34.247   57.547   1.000 28.74
ANISOU 355   N   ALA  45   2897     2938     5083    -562  710   -2061
ATOM   356   CA  ALA  45   3.382   34.751   58.623   1.000 27.09
ANISOU 356   CA  ALA  45   2716     2817     4761    -751  467   -2140
ATOM   357   C   ALA  45   1.943   35.014   58.195   1.000 24.95
ANISOU 357   C   ALA  45   2697     3110     3673    -784  709   -1257
ATOM   358   O   ALA  45   1.021   34.515   58.875   1.000 22.50
ANISOU 358   O   ALA  45   2762     2585     3201    -565  560   -1146
ATOM   359   CB  ALA  45   3.975   36.005   59.248   1.000 36.30
ANISOU 359   CB  ALA  45   3259     4219     6315    -1912 1332  -3404
ATOM   360   N   SER  46   1.729   35.779   57.128   1.000 26.85
ANISOU 360   N   SER  46   3258     3756     3187    -1732 618   -1184
ATOM   361   CA  SER  46   0.380   36.052   56.642   1.000 24.97
ANISOU 361   CA  SER  46   3686     3189     2611    -1223 511   -1105
ATOM   362   CB  SER  46   0.422   36.950   55.392   1.000 32.35
ANISOU 362   CB  SER  46   5428     3467     3395    -2233 70    -458
ATOM   363   OG  SER  46   0.630   38.289   55.772   1.000 45.77
ANISOU 363   OG  SER  46   7730     3349     6313    -2746 2499  -807
ATOM   364   C   SER  46  -0.408   34.787   56.307   1.000 20.63
ANISOU 364   C   SER  46   2797     2469     2572    -423  -151  -542
ATOM   365   O   SER  46  -1.578   34.672   56.698   1.000 21.93
ANISOU 365   O   SER  46   3120     2486     2725    -559  305   -403
ATOM   366   N   ALA  47   0.211   33.855   55.590   1.000 22.39
ANISOU 366   N   ALA  47   3096     2167     3244    -488  394   -368
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ATOM    367   CA   ALA   47    -0.397   32.596   55.176  1.000 19.54
ANISOU  367   CA   ALA   47    2746     1863     2814    -289   362   -18
ATOM    368   CB   ALA   47     0.548   31.900   54.191  1.000 23.54
ANISOU  368   CB   ALA   47    3524     1717     3705    -617  1237  -159
ATOM    369   C    ALA   47    -0.715   31.714   56.381  1.000 19.95
ANISOU  369   C    ALA   47    2282     2546     2752    -327    19   257
ATOM    370   O    ALA   47    -1.836   31.199   56.518  1.000 19.66
ANISOU  370   O    ALA   47    2489     2589     2393    -614   211  -165
ATOM    371   N    LYS   48     0.270   31.558   57.268  1.000 18.24
ANISOU  371   N    LYS   48    2713     1966     2253    -210  -139  -912
ATOM    372   CA   LYS   48     0.042   30.782   58.486  1.000 19.33
ANISOU  372   CA   LYS   48    2398     2625     2321     43  -312  -563
ATOM    373   C    LYS   48    -1.110   31.329   59.322  1.000 20.57
ANISOU  373   C    LYS   48    2476     2556     2785    -326    83  -566
ATOM    374   O    LYS   48    -2.022   30.613   59.771  1.000 20.34
ANISOU  374   O    LYS   48    3207     2598     1923    -521   139  -340
ATOM    375   CB   LYS   48     1.352   30.758   59.294  1.000 24.61
ANISOU  375   CB   LYS   48    2400     3792     3158    -258  -556   -80
ATOM    376   CG   LYS   48     1.237   29.873   60.531  1.000 30.84
ANISOU  376   CG   LYS   48    4306     4044     3366    -291 -1504   277
ATOM    377   CD   LYS   48     1.837   30.575   61.736  1.000 41.45
ANISOU  377   CD   LYS   48    6742     5755     3251   -1067 -1382  -356
ATOM    378   CE   LYS   48     1.625   29.717   62.966  1.000 41.63
ANISOU  378   CE   LYS   48    6620     6124     3073    -466 -1047  -353
ATOM    379   NZ   LYS   48     1.074   30.497   64.112  1.000 42.62
ANISOU  379   NZ   LYS   48    5883     6866     3444    460  -1193  -425
ATOM    380   N    ASP   49    -1.110   32.625   59.607  1.000 19.18
ANISOU  380   N    ASP   49    2348     2602     2337    -464   100  -806
ATOM    381   CA   ASP   49    -2.127   33.243   60.433  1.000 21.95
ANISOU  381   CA   ASP   49    2555     2986     2801    -791   617 -1035
ATOM    382   CB   ASP   49    -1.868   34.756   60.611  1.000 23.97
ANISOU  382   CB   ASP   49    2827     2872     3409    -250   -79 -1325
ATOM    383   CG   ASP   49    -0.681   35.078   61.492  1.000 25.41
ANISOU  383   CG   ASP   49    2787     3405     3464    -365   113 -1866
ATOM    384   OD1  ASP   49    -0.153   34.153   62.143  1.000 30.75
ANISOU  384   OD1  ASP   49    3572     4181     3932    -254  -967 -1667
ATOM    385   OD2  ASP   49    -0.235   36.256   61.563  1.000 30.78
ANISOU  385   OD2  ASP   49    3303     3649     4742    -710   344 -2413
ATOM    386   C    ASP   49    -3.543   33.061   59.904  1.000 21.44
ANISOU  386   C    ASP   49    2465     2651     3030    -388   540  -900
ATOM    387   O    ASP   49    -4.476   32.770   60.654  1.000 20.72
ANISOU  387   O    ASP   49    2346     2181     3347    -279   550  -726
ATOM    388   N    LEU   50    -3.731   33.269   58.596  1.000 23.28
ANISOU  388   N    LEU   50    2942     2712     3191   -1251   216  -644
ATOM    389   CA   LEU   50    -5.086   33.185   58.068  1.000 22.94
ANISOU  389   CA   LEU   50    3104     1796     3815    -575  -205 -1079
ATOM    390   CB   LEU   50    -5.204   33.861   56.696  1.000 28.78
ANISOU  390   CB   LEU   50    3948     2453     4535    -852  -755  -254
ATOM    391   CG   LEU   50    -6.620   34.246   56.260  1.000 25.30
ANISOU  391   CG   LEU   50    3800     2294     3520     30   325  -531
ATOM    392   CD1  LEU   50    -7.552   34.478   57.441  1.000 44.77
ANISOU  392   CD1  LEU   50    6382     4432     6196    -475  3026 -1060
ATOM    393   CD2  LEU   50    -6.625   35.485   55.385  1.000 32.52
ANISOU  393   CD2  LEU   50    5861     1962     4533    752   354  -433
ATOM    394   C    LEU   50    -5.566   31.737   57.982  1.000 21.12
ANISOU  394   C    LEU   50    2559     1870     3595    -643   742 -1270
ATOM    395   O    LEU   50    -6.772   31.494   58.175  1.000 21.13
ANISOU  395   O    LEU   50    2491     2457     3083    -543   579 -1097
ATOM    396   N    VAL   51    -4.681   30.769   57.715  1.000 16.27
ANISOU  396   N    VAL   51    2517     1843     1823    -302    -3  -646
ATOM    397   CA   VAL   51    -5.186   29.370   57.701  1.000 18.07
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ANISOU 397   CA   VAL   51   3154      1763      1947    -401   -15   - 427
ATOM   398   CB   VAL   51   -4.281   28.415   56.889   1.000 16.07
ANISOU 398   CB   VAL   51   2981      1629      1496    -621  -255 - 5 0 1
ATOM   399   CG1  VAL   51   -3.002   28.114   57.662   1.000 18.99
ANISOU 399   CG1  VAL   51   2959      2382      1875    -383  -100 3 0 2
ATOM   400   CG2  VAL   51   -5.006   27.119   56.497   1.000 22.16
ANISOU 400   CG2  VAL   51   4569      2121      1728   -1393  64  - 8 6 9
ATOM   401   C    VAL   51   -5.446   28.899   59.114   1.000 17.74
ANISOU 401   C    VAL   51   2508      2223      2009    -435   142   - 445
ATOM   402   O    VAL   51   -6.430   28.187   59.346   1.000 19.76
ANISOU 402   O    VAL   51   3005      2160      2345    -692   726  - 1021
ATOM   403   N    ILE   52   -4.671   29.263   60.125   1.000 20.23
ANISOU 403   N    ILE   52   2980      2945      1760    -649   364   - 902
ATOM   404   CA   ILE   52   -4.990   28.875   61.507   1.000 20.17
ANISOU 404   CA   ILE   52   3200      2665      1800    -758   627   - 1134
ATOM   405   CB   ILE   52   -3.847   29.230   62.469   1.000 21.31
ANISOU 405   CB   ILE   52   3294      3151      1652    -449   462 ,- 1043
ATOM   406   CG2  ILE   52   -4.238   29.178   63.931   1.000 21.29
ANISOU 406   CG2  ILE   52   3543      2826      1719    -362   529   - 689
ATOM   407   CG1  ILE   52   -2.619   28.346   62.217   1.000 25.37
ANISOU 407   CG1  ILE   52   3213      3819      2608    -307   727   - 1090
ATOM   408   CD1  ILE   52   -2.871   26.872   62.470   1.000 28.56
ANISOU 408   CD1  ILE   52   3474      3578      3798    106    178   - 1110
ATOM   409   C    ILE   52   -6.284   29.514   61.950   1.000 22.44
ANISOU 409   C    ILE   52   3119      3216      2190    -710   645   - 1228
ATOM   410   O    ILE   52   -7.072   28.856   62.647   1.000 23.23
ANISOU 410   O    ILE   52   3390      3654      1781    -766   758   - 1246
ATOM   411   N    ASP   53   -6.519   30.754   61.530   1.000 23.33
ANISOU 411   N    ASP   53   2897      3064      2903    -626   700   - 1361
ATOM   412   CA   ASP   53   -7.826   31.335   61.897   1.000 24.49
ANISOU 412   CA   ASP   53   2818      3347      3141    -759   781   - 1545
ATOM   413   CB   ASP   53   -7.942   32.781   61.411   1.000 27.43
ANISOU 413   CB   ASP   53   2854      3335      4235    -434   819   - 1446
ATOM   414   CG   ASP   53   -9.309   33.397   61.570   1.000 30.99
ANISOU 414   CG   ASP   53   3166      4281      4326    36  1242   - 1 2 1 4
ATOM   415   OD1  ASP   53   -9.657   33.779   62.705   1.000 37.26
ANISOU 415   OD1  ASP   53   4369      4569      5220    153   1263 - 2 7 3 3
ATOM   416   OD2  ASP   53   -10.050  33.491   60.553   1.000 38.45
ANISOU 416   OD2  ASP   53   3393      6043      5173    810    557   - 1648
ATOM   417   C    ASP   53   -8.953   30.495   61.316   1.000 24.64
ANISOU 417   C    ASP   53   3028      3701      2634    -919   372   - 1031
ATOM   418   O    ASP   53   -10.011  30.327   61.915   1.000 28.52
ANISOU 418   O    ASP   53   3399      3835      3603   -1519  962   - 2151
ATOM   419   N    PHE   54   -8.744   29.978   60.108   1.000 22.04
ANISOU 419   N    PHE   54   2921      2974      2479    -573   174   - 7 0 4
ATOM   420   CA   PHE   54   -9.772   29.187   59.432   1.000 19.99
ANISOU 420   CA   PHE   54   2253      2879      2463    -421   771   - 9 7 8
ATOM   421   CB   PHE   54   -9.423   29.030   57.942   1.000 18.45
ANISOU 421   CB   PHE   54   2856      1983      2171    -65    426   - 518
ATOM   422   CG   PHE   54   -10.493  28.292   57.145   1.000 21.36
ANISOU 422   CG   PHE   54   3063      2735      2318    -646   599   - 6 2 7
ATOM   423   CD1  PHE   54   -11.714  28.906   56.933   1.000 23.18
ANISOU 423   CD1  PHE   54   3199      2783      2826    -703   -29   - 6 2 4
ATOM   424   CD2  PHE   54   -10.293  27.035   56.619   1.000 23.32
ANISOU 424   CD2  PHE   54   3482      2802      2577    -689   212   - 858
ATOM   425   CE1  PHE   54   -12.719  28.291   56.241   1.000 26.45
ANISOU 425   CE1  PHE   54   3345      3696      3008   -1418  129   - 5 5 4
ATOM   426   CE2  PHE   54   -11.303  26.375   55.921   1.000 25.65
ANISOU 426   CE2  PHE   54   3750      3815      2182   -1404  607   - 1005
ATOM   427   CZ   PHE   54   -12.522  27.013   55.725   1.000 26.17
ANISOU 427   CZ   PHE   54   3433      3830      2679   -1829  298   - 813
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ATOM     428  C    PHE   54    -9.959  27.854  60.132  1.000 19.44
ANISOU   428  C    PHE   54   2340   3430   1617    -834   319   -759
ATOM     429  O    PHE   54   -11.087 27.450  60.386  1.000 22.11
ANISOU   429  O    PHE   54   2601   3066   2734    -948  1018  -1466
ATOM     430  N    PHE   55    -8.882 27.166  60.448  1.000 20.59
ANISOU   430  N    PHE   55   2728   3375   1720    -666   180   -611
ATOM     431  CA   PHE   55    -8.966 25.927  61.212  1.000 22.59
ANISOU   431  CA   PHE   55   3092   3671   1820    -728   381   -372
ATOM     432  CB   PHE   55    -7.579 25.360  61.478  1.000 21.93
ANISOU   432  CB   PHE   55   3163   3622   1549    -692   287   -158
ATOM     433  CG   PHE   55    -6.790 24.833  60.284  1.000 20.60
ANISOU   433  CG   PHE   55   3034   2998   1793   -1004   365   -375
ATOM     434  CD1  PHE   55    -7.352 24.526  59.057  1.000 18.72
ANISOU   434  CD1  PHE   55   2300   3095   1717   -1078   586   -271
ATOM     435  CD2  PHE   55    -5.430 24.615  60.385  1.000 18.06
ANISOU   435  CD2  PHE   55   3132   2490   1241    -926   128   -497
ATOM     436  CE1  PHE   55    -5.609 24.037  58.014  1.000 18.92
ANISOU   436  CE1  PHE   55   2455   2761   1971    -844   436   -542
ATOM     437  CE2  PHE   55    -4.672 24.124  59.352  1.000 18.58
ANISOU   437  CE2  PHE   55   3291   2606   1163    -478    63   -299
ATOM     438  CZ   PHE   55    -5.256 23.814  58.134  1.000 17.68
ANISOU   438  CZ   PHE   55   2660   2567   1490    -380   129   -806
ATOM     439  C    PHE   55    -9.684 26.111  62.546  1.000 24.99
ANISOU   439  C    PHE   55   3310   4138   2046    -830   647   -415
ATOM     440  O    PHE   55   -10.532 25.281  62.872  1.000 30.29
ANISOU   440  O    PHE   55   3802   4943   2763   -1527  1314  -1102
ATOM     441  N    GLU   56    -9.330 27.144  63.311  1.000 23.65
ANISOU   441  N    GLU   56   2864   4109   2013    -634   937   -525
ATOM     442  CA   GLU   56    -9.868 27.355  64.636  1.000 30.01
ANISOU   442  CA   GLU   56   3632   5378   2394   -1050  1465   -994
ATOM     443  CB   GLU   56    -8.998 28.333  65.436  1.000 36.40
ANISOU   443  CB   GLU   56   4531   6933   2367   -1606  1318  -1623
ATOM     444  CG   GLU   56    -7.666 27.827  65.916  1.000 41.89
ANISOU   444  CG   GLU   56   5006   8196   2713   -1457   404  -1900
ATOM     445  CD   GLU   56    -6.787 28.880  66.575  1.000 48.94
ANISOU   445  CD   GLU   56   6081   9310   3202   -2278   -73  -2062
ATOM     446  OE1  GLU   56    -5.694 28.515  67.078  1.000 60.73
ANISOU   446  OE1  GLU   56   8034  12274   2769   -3208 -2335   266
ATOM     447  OE2  GLU   56    -7.145 30.084  66.614  1.000 58.51
ANISOU   447  OE2  GLU   56   8742   9338   4151   -2088  1096  -3951
ATOM     448  C    GLU   56   -11.289 27.920  64.617  1.000 30.60
ANISOU   448  C    GLU   56   3764   4923   2941    -977  1967  -1271
ATOM     449  O    GLU   56   -12.058 27.542  65.504  1.000 35.21
ANISOU   449  O    GLU   56   4384   5304   3690   -1136  2652  -1235
ATOM     450  N    HIS   57   -11.603 28.805  63.673  1.000 30.00
ANISOU   450  N    HIS   57   3730   4846   2823    -654  1684  -1582
ATOM     451  CA   HIS   57   -12.854 29.559  63.759  1.000 33.51
ANISOU   451  CA   HIS   57   3853   5101   3778    -519  1673  -1911
ATOM     452  CB   HIS   57   -12.536 31.046  63.991  1.000 33.40
ANISOU   452  CB   HIS   57   3844   5183   3664    -411  1546  -2250
ATOM     453  CG   HIS   57   -11.577 31.344  65.095  1.000 35.13
ANISOU   453  CG   HIS   57   4497   5409   3444    -505  1340  -1992
ATOM     454  CD2  HIS   57   -10.361 31.946  65.071  1.000 35.26
ANISOU   454  CD2  HIS   57   4837   5214   3345    -834   637  -1456
ATOM     455  ND1  HIS   57   -11.819 31.021  66.411  1.000 40.52
ANISOU   455  ND1  HIS   57   6021   5885   3490   -1360  1474  -2002
ATOM     456  CE1  HIS   57   -10.798 31.410  67.151  1.000 42.28
ANISOU   456  CE1  HIS   57   6680   6066   3320   -1632  1099  -1772
ATOM     457  NE2  HIS   57    -9.902 31.970  66.362  1.000 41.69
ANISOU   457  NE2  HIS   57   6377   6133   3329   -1817   407  -1148
ATOM     458  C    HIS   57   -13.769 29.466  62.547  1.000 32.58
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ANISOU 458   C    HIS  57   3083      5097    4199    -729  1723  -2066
ATOM   459   O    HIS  57  -14.902 29.965  62.578  1.000 33.80
ANISOU 459   O    HIS  57   3121      5097    4625    -731  1865  -2565
ATOM   460   N    GLY  58  -13.370 28.866  61.432  1.000 28.78
ANISOU 460   N    GLY  58   2841      4353    3742    -253  1341  -1506
ATOM   461   CA   GLY  58  -14.326 28.685  60.332  1.000 26.99
ANISOU 461   CA   GLY  58   2471      3916    3869     24  1298  -1173
ATOM   462   C    GLY  58  -15.447 27.737  60.738  1.000 29.94
ANISOU 462   C    GLY  58   2665      4357    4353    -261  1323  -1058
ATOM   463   O    GLY  58  -15.241 26.805  61.534  1.000 29.23
ANISOU 463   O    GLY  58   2976      4044    4087    -571  1192  -1297
ATOM   464   N    SER  59  -16.635 27.958  60.193  1.000 27.61
ANISOU 464   N    SER  59   2556      3905    4029    -108  1461  -1767
ATOM   465   CA   SER  59  -17.812 27.153  60.497  1.000 28.42
ANISOU 465   CA   SER  59   2675      4074    4049    -189  1294  -1325
ATOM   466   CB   SER  59  -19.121 27.889  60.162  1.000 28.29
ANISOU 466   CB   SER  59   2556      4574    3618    -339  1198   -928
ATOM   467   OG   SER  59  -19.229 27.978  58.739  1.000 28.66
ANISOU 467   OG   SER  59   3598      3742    3547    166  1729   -867
ATOM   468   C    SER  59  -17.795 25.843  59.724  1.000 29.57
ANISOU 468   C    SER  59   3467      3990    3779    -646  1463  -1206
ATOM   469   O    SER  59  -16.990 25.651  58.810  1.000 22.72
ANISOU 469   O    SER  59   3054      3042    2537    -144   648   -369
ATOM   470   N    GLU  60  -18.698 24.939  60.103  1.000 26.90
ANISOU 470   N    GLU  60   2413      3900    3907    -69  1079   -853
ATOM   471   CA   GLU  60  -18.699 23.684  59.359  1.000 26.98
ANISOU 471   CA   GLU  60   2699      3515    4037    -98   709   -537
ATOM   472   CB   GLU  60  -19.646 22.681  60.001  1.000 39.11
ANISOU 472   CB   GLU  60   5393      4393    5075  -1361   908    364
ATOM   473   CG   GLU  60  -19.011 21.665  60.917  1.000 44.63
ANISOU 473   CG   GLU  60   5606      5473    5878   -977  1079   1219
ATOM   474   CD   GLU  60  -17.507 21.543  60.797  1.000 48.52
ANISOU 474   CD   GLU  60   5714      6217    6503   -390  1207    877
ATOM   475   OE1  GLU  60  -17.030 21.223  59.684  1.000 48.11
ANISOU 475   OE1  GLU  60   5349      7545    5384    709   366   1951
ATOM   476   OE2  GLU  60  -16.828 21.763  61.829  1.000 46.50
ANISOU 476   OE2  GLU  60   4926      5742    7000   1158  1550  -1504
ATOM   477   C    GLU  60  -19.091 23.960  57.915  1.000 25.30
ANISOU 477   C    GLU  60   2829      2728    4055     86   725   -656
ATOM   478   O    GLU  60  -18.529 23.346  57.027  1.000 24.18
ANISOU 478   O    GLU  60   2119      2980    4091   -202   741   -752
ATOM   479   N    ALA  61  -20.032 24.890  57.716  1.000 25.58
ANISOU 479   N    ALA  61   2083      3206    4432    -34   612   -774
ATOM   480   CA   ALA  61  -20.495 25.212  56.368  1.000 24.05
ANISOU 480   CA   ALA  61   1838      2999    4301    228   720  -1055
ATOM   481   CB   ALA  61  -21.670 26.176  56.459  1.000 27.53
ANISOU 481   CB   ALA  61   2807      1857    5797    394   704   -606
ATOM   482   C    ALA  61  -19.385 25.790  55.500  1.000 27.31
ANISOU 482   C    ALA  61   3170      2572    4633   -377  1178  -1026
ATOM   483   O    ALA  61  -19.247 25.467  54.311  1.000 22.29
ANISOU 483   O    ALA  61   2363      1876    4232     42   661   -319
ATOM   484   N    GLU  62  -18.580 26.642  56.118  1.000 22.18
ANISOU 484   N    GLU  62   2075      2258    4094    396   569   -394
ATOM   485   CA   GLU  62  -17.455 27.258  55.416  1.000 24.19
ANISOU 485   CA   GLU  62   2401      2603    4188    150   852   -590
ATOM   486   CB   GLU  62  -16.806 28.354  56.277  1.000 24.68
ANISOU 486   CB   GLU  62   2401      2490    4485     91  1273   -828
ATOM   487   CG   GLU  62  -17.641 29.636  56.356  1.000 25.19
ANISOU 487   CG   GLU  62   2542      2620    4409    353   421   -685
ATOM   488   CD   GLU  62  -17.288 30.581  57.480  1.000 29.27
ANISOU 488   CD   GLU  62   3284      2991    4845    621   515  -1290
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ATOM     489   OE1 GLU   62   -16.527 30.241  58.410  1.000 30.11
ANISOU   489   OE1 GLU   62    3231     3067    5143     318   56 -1639
ATOM     490   OE2 GLU   62   -17.796 31.739  57.436  1.000 35.30
ANISOU   490   OE2 GLU   62    4832     2994    5584     863  109 -1327
ATOM     491   C   GLU   62   -16.409 26.226  55.025  1.000 21.70
ANISOU   491   C   GLU   62    2394     2421    3430      30  784  -579
ATOM     492   O   GLU   62   -15.818 26.218  53.940  1.000 19.44
ANISOU   492   O   GLU   62    2095     2140    3153    -301  467  -604
ATOM     493   N   LYS   63   -16.184 25.308  55.972  1.000 20.08
ANISOU   493   N   LYS   63    2472     2266    2893     -74  761  -902
ATOM     494   CA  LYS   63   -15.246 24.227  55.678  1.000 19.73
ANISOU   494   CA  LYS   63    2322     2559    2614     133  429  -903
ATOM     495   CB  LYS   63   -14.934 23.497  56.988  1.000 18.48
ANISOU   495   CB  LYS   63    1803     2743    2476    -218  587  -836
ATOM     496   CG  LYS   63   -13.946 24.240  57.881  1.000 19.17
ANISOU   496   CG  LYS   63    2115     2332    2836    -296  325  -674
ATOM     497   CD  LYS   63   -13.839 23.651  59.290  1.000 26.23
ANISOU   497   CD  LYS   63    2978     4084    2902    -888 -177 -287
ATOM     498   CE  LYS   63   -12.753 24.383  60.068  1.000 27.75
ANISOU   498   CE  LYS   63    3074     5008    2461   -1239  500 -1082
ATOM     499   NZ  LYS   63   -12.929 24.378  61.530  1.000 34.95
ANISOU   499   NZ  LYS   63    3177     7579    2524   -2594  840  -894
ATOM     500   C   LYS   63   -15.789 23.304  54.586  1.000 17.52
ANISOU   500   C   LYS   63    2014     2191    2453      51  529  -691
ATOM     501   O   LYS   63   -15.025 22.953  53.654  1.000 17.58
ANISOU   501   O   LYS   63    2266     1709    2704     158  707  -653
ATOM     502   N   ARG   64   -17.069 22.912  54.641  1.000 19.63
ANISOU   502   N   ARG   64    2081     2452    2926     -14  614  -592
ATOM     503   CA  ARG   64   -17.618 22.041  53.595  1.000 19.00
ANISOU   503   CA  ARG   64    1509     2526    3185      -3  620  -652
ATOM     504   C   ARG   64   -17.471 22.634  52.194  1.000 20.42
ANISOU   504   C   ARG   64    2165     2436    3157    -390  -22  -536
ATOM     505   O   ARG   64   -17.204 21.934  51.195  1.000 18.83
ANISOU   505   O   ARG   64    1854     2184    3115    -434  575  -201
ATOM     506   CB  ARG   64   -19.080 21.670  53.871  1.000 24.70
ANISOU   506   CB  ARG   64    1470     3652    4263     -51  841  -909
ATOM     507   CG  ARG   64   -19.838 20.933  52.795  1.000 36.49
ANISOU   507   CG  ARG   64    2961     5284    5621   -2020  138  -882
ATOM     508   CD  ARG   64   -21.315 20.645  53.095  1.000 46.32
ANISOU   508   CD  ARG   64    3034     6962    7603   -2438  327 -1187
ATOM     509   NE  ARG   64   -21.776 21.216  54.331  1.000 55.81
ANISOU   509   NE  ARG   64    3917     8636    8652   -3960 2222 -1870
ATOM     510   CZ  ARG   64   -22.814 21.840  54.811  1.000 58.82
ANISOU   510   CZ  ARG   64    4438     8939    8972   -3479 1988 -2480
ATOM     511   NH1 ARG   64   -23.884 22.106  54.071  1.000 76.83
ANISOU   511   NH1 ARG   64    6024     9527   13641   -1787 -165 -1872
ATOM     512   NH2 ARG   64   -22.797 22.213  56.093  1.000 69.53
ANISOU   512   NH2 ARG   64    7792     9201    9424   -5884 3891 -3304
ATOM     513   N   ALA   65   -17.621 23.947  52.066  1.000 20.43
ANISOU   513   N   ALA   65    1689     2554    3519      24  612  -525
ATOM     514   CA  ALA   65   -17.505 24.656  50.782  1.000 19.45
ANISOU   514   CA  ALA   65    1649     2216    3523     409  184  -553
ATOM     515   CB  ALA   65   -17.912 26.108  50.984  1.000 23.73
ANISOU   515   CB  ALA   65    1420     2019    5579     126 -373  -742
ATOM     516   C   ALA   65   -16.118 24.549  50.168  1.000 17.89
ANISOU   516   C   ALA   65    1524     2099    3173     -47  108  -101
ATOM     517   O   ALA   65   -15.983 24.732  48.954  1.000 18.77
ANISOU   517   O   ALA   65    1830     2178    3123     122   -8  -229
ATOM     518   N   VAL   66   -15.100 24.248  50.973  1.000 17.99
ANISOU   518   N   VAL   66    1547     2151    3137     -86   36  -196
ATOM     519   CA  VAL   66   -13.746 24.066  50.430  1.000 16.74
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ANISOU 519   CA  VAL  66    1553      1859      2948     -62    -56   -254
ATOM   520   CB  VAL  66   -12.775 25.151  50.951  1.000 17.29
ANISOU 520   CB  VAL  66    1805      1804      2963    -330    338   -185
ATOM   521   CG1 VAL  66   -13.238 26.532  50.455  1.000 16.70
ANISOU 521   CG1 VAL  66    1547      1800      2997     111    545   -553
ATOM   522   CG2 VAL  66   -12.652 25.180  52.462  1.000 18.65
ANISOU 522   CG2 VAL  66    2053      1995      3036    -193     17   -538
ATOM   523   C   VAL  66   -13.201 22.680  50.724  1.000 15.66
ANISOU 523   C   VAL  66    1775      1813      2362     -70   -250   -457
ATOM   524   O   VAL  66   -11.972 22.493  50.808  1.000 14.19
ANISOU 524   O   VAL  66    1747      1576      2069    -122    -56   -347
ATOM   525   N   THR  67   -14.071 21.695  50.873  1.000 14.46
ANISOU 525   N   THR  67    1550      1602      2343     126    -48   -722
ATOM   526   CA  THR  67   -13.723 20.279  51.000  1.000 14.06
ANISOU 526   CA  THR  67    1461      1698      2185     234      5   -740
ATOM   527   CB  THR  67   -14.419 19.647  52.225  1.000 15.08
ANISOU 527   CB  THR  67    1721      1955      2053     -51   -426   -444
ATOM   528   OG1 THR  67   -14.089 20.337  53.453  1.000 17.41
ANISOU 528   OG1 THR  67    2538      1949      2128     -39     70   -716
ATOM   529   CG2 THR  67   -13.915 18.215  52.420  1.000 16.63
ANISOU 529   CG2 THR  67    2182      1888      2248     143    293   -658
ATOM   530   C   THR  67   -14.067 19.518  49.728  1.000 12.37
ANISOU 530   C   THR  67    1144      1422      2132     209    -95   -517
ATOM   531   O   THR  67   -15.208 19.567  49.229  1.000 14.82
ANISOU 531   O   THR  67    1197      2086      2350     208   -168   -362
ATOM   532   N   SER  68   -13.092 18.790  49.180  1.000 11.61
ANISOU 532   N   SER  68    1109      1421      1881      37    -58   -534
ATOM   533   CA  SER  68   -13.306 17.955  48.003  1.000 11.45
ANISOU 533   CA  SER  68    1274      1444      1631     -49    -30   -374
ATOM   534   CB  SER  68   -12.027 17.317  47.480  1.000 11.88
ANISOU 534   CB  SER  68    1446      1523      1544      79    252   -157
ATOM   535   OG  SER  68   -11.026 18.292  47.239  1.000 16.95
ANISOU 535   OG  SER  68    1557      2314      2569    -336    389   -218
ATOM   536   C   SER  68   -14.269 16.815  48.319  1.000 11.56
ANISOU 536   C   SER  68    1287      1375      1732     -61     53   -406
ATOM   537   O   SER  68   -14.308 16.384  49.476  1.000 14.62
ANISOU 537   O   SER  68    1998      1860      1697    -538    153   -430
ATOM   538   N   PRO  69   -15.026 16.324  47.344  1.000 12.78
ANISOU 538   N   PRO  69    1476      1473      1905    -243    -88   -194
ATOM   539   CD  PRO  69   -15.130 16.801  45.953  1.000 12.47
ANISOU 539   CD  PRO  69    1022      1808      1909    -199   -203   -144
ATOM   540   CA  PRO  69   -15.941 15.214  47.639  1.000 12.21
ANISOU 540   CA  PRO  69    1358      1369      1913    -178    148   -437
ATOM   541   CB  PRO  69   -16.825 15.193  46.355  1.000 13.94
ANISOU 541   CB  PRO  69    1362      1591      2343    -251   -178    -14
ATOM   542   CG  PRO  69   -15.924 15.715  45.290  1.000 14.38
ANISOU 542   CG  PRO  69    1396      1947      2122    -554   -511    178
ATOM   543   C   PRO  69   -15.270 13.882  47.912  1.000 13.25
ANISOU 543   C   PRO  69    1206      1526      2303    -217   -115   -100
ATOM   544   O   PRO  69   -15.932 12.985  48.481  1.000 14.01
ANISOU 544   O   PRO  69    1753      1450      2122    -373     99   -301
ATOM   545   N   VAL  70   -14.015 13.692  47.554  1.000 13.46
ANISOU 545   N   VAL  70    1288      1479      2348    -174   -108   -265
ATOM   546   CA  VAL  70   -13.184 12.548  47.898  1.000 13.49
ANISOU 546   CA  VAL  70    1404      1692      2030      37    138   -195
ATOM   547   CB  VAL  70   -12.587 11.720  46.737  1.000 16.39
ANISOU 547   CB  VAL  70    2142      1648      2439    -225    614   -452
ATOM   548   CG1 VAL  70   -13.615 10.756  46.208  1.000 33.50
ANISOU 548   CG1 VAL  70    6470      2984      3274   -2702     41   -867
ATOM   549   CG2 VAL  70   -11.995 12.613  45.640  1.000 16.46
ANISOU 549   CG2 VAL  70    1749      2234      2273     269    444     23
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ATOM    550  C    VAL  70   -12.042 13.057  48.782  1.000 13.59
ANISOU  550  C    VAL  70    1618    1382    2163    -38  -114 127
ATOM    551  O    VAL  70   -11.426 14.105  48.493  1.000 14.20
ANISOU  551  O    VAL  70    1748    1685    1964   -265   26 182
ATOM    552  N    PRO  71   -11.786 12.365  49.898  1.000 14.21
ANISOU  552  N    PRO  71    1607    1507    2285   -115  -62 310
ATOM    553  CD   PRO  71   -12.432 11.125  50.378  1.000 14.70
ANISOU  553  CD   PRO  71    1920    1590    2076   -201  646   4
ATOM    554  CA   PRO  71   -10.830 12.919  50.878  1.000 17.41
ANISOU  554  CA   PRO  71    2429    2008    2178   -522 -342 418
ATOM    555  CB   PRO  71   -11.338 12.304  52.193  1.000 20.87
ANISOU  555  CB   PRO  71    3768    2082    2081   -743  190   1 4
ATOM    556  CG   PRO  71   -11.908 10.989  51.775  1.000 18.28
ANISOU  556  CG   PRO  71    3534    1665    1746   -338  781  - 5 4
ATOM    557  C    PRO  71    -9.384 12.543  50.619  1.000 17.14
ANISOU  557  C    PRO  71    2183    2304    2026   -684 -815 4 4
ATOM    558  O    PRO  71    -8.730 11.796  51.330  1.000 20.54
ANISOU  558  O    PRO  71    2745    2610    2443    -87 -404 414
ATOM    559  N    THR  72    -8.834 13.111  49.556  1.000 16.59
ANISOU  559  N    THR  72    2156    2046    2103   -235 -508 - 1 7
ATOM    560  CA   THR  72    -7.496 12.818  49.090  1.000 17.43
ANISOU  560  CA   THR  72    2113    1884    2626   -254 -510 -2 8 8
ATOM    561  CB   THR  72    -7.477 12.829  47.545  1.000 15.98
ANISOU  561  CB   THR  72    1700    1761    2611    211 -458 -4 2 1
ATOM    562  OG1  THR  72    -8.027 14.094  47.128  1.000 17.28
ANISOU  562  OG1  THR  72    2146    1553    2868     27 -355  - 2 71
ATOM    563  CG2  THR  72    -8.348 11.764  46.929  1.000 12.63
ANISOU  563  CG2  THR  72    1296    1581    1923    -46  328  - 1 2 7
ATOM    564  C    THR  72    -6.418 13.805  49.549  1.000 17.83
ANISOU  564  C    THR  72    2153    1773    2847   -155 -1228 2 3 2
ATOM    565  O    THR  72    -5.216 13.536  49.329  1.000 20.17
ANISOU  565  O    THR  72    2142    2265    3257   -225 -1049 480
ATOM    566  N    MET  73    -6.785 14.920  50.169  1.000 19.43
ANISOU  566  N    MET  73    2876    2052    2455   -782 -451 -1 4 4
ATOM    567  CA   MET  73    -5.799 15.944  50.521  1.000 18.75
ANISOU  567  CA   MET  73    2117    2326    2682   -538 -466 -2 8 0
ATOM    568  CB   MET  73    -4.758 15.338  51.480  1.000 22.03
ANISOU  568  CB   MET  73    1826    2825    3718   -377 -306 595
ATOM    569  CG   MET  73    -5.374 15.059  52.843  1.000 27.01
ANISOU  569  CG   MET  73    3545    2853    3864    -84  -87  15 2 6
ATOM    570  SD   MET  73    -4.107 14.850  54.107  1.000 32.23
ANISOU  570  SD   MET  73    4364    4245    3637    469 -400 583
ATOM    571  CE   MET  73    -3.179 13.492  53.374  1.000 26.74
ANISOU  571  CE   MET  73    2885    4895    2381    326  425  13 4 8
ATOM    572  C    MET  73    -5.066 16.582  49.355  1.000 17.20
ANISOU  572  C    MET  73    1338    2129    3067    -20 -269 -175
ATOM    573  O    MET  73    -3.945 17.110  49.498  1.000 21.20
ANISOU  573  O    MET  73    1713    2512    3832   -541   51 -1024
ATOM    574  N    ARG  74    -5.630 16.600  48.175  1.000 18.64
ANISOU  574  N    ARG  74    1881    2051    3150     84 -461  543
ATOM    575  CA   ARG  74    -5.091 17.180  46.967  1.000 15.73
ANISOU  575  CA   ARG  74     937    1986    3053    169   27 -174
ATOM    576  CB   ARG  74    -5.655 16.537  45.704  1.000 16.53
ANISOU  576  CB   ARG  74    1711    1434    3137   -263  142  -160
ATOM    577  CG   ARG  74    -4.911 16.934  44.440  1.000 15.01
ANISOU  577  CG   ARG  74    1270    1288    3144   -156  279  -554
ATOM    578  CD   ARG  74    -5.683 16.543  43.185  1.000 16.10
ANISOU  578  CD   ARG  74    1967    1031    3120    268  -92  -407
ATOM    579  NE   ARG  74    -4.902 16.816  41.966  1.000 18.81
ANISOU  579  NE   ARG  74    2259    1813    3075   -432 -252 -296
ATOM    580  CZ   ARG  74    -5.033 17.824  41.130  1.000 16.64
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ANISOU 580   CZ   ARG  74   1968    1646    2709    -141 -190 -596
ATOM   581   NH1  ARG  74  -5.951   18.775  41.293  1.000 20.09
ANISOU 581   NH1  ARG  74   1899    2075    3660    54 -353  -788
ATOM   582   NH2  ARG  74  -4.220   17.896  40.068  1.000 20.12
ANISOU 582   NH2  ARG  74   2366    2844    2437    153  -196 -400
ATOM   583   C    ARG  74  -5.373   18.681  46.966  1.000 12.70
ANISOU 583   C    ARG  74   1187    1880    1758    6   -22  -136
ATOM   584   O    ARG  74  -4.501   19.465  46.582  1.000 14.07
ANISOU 584   O    ARG  74   1049    2048    2247    -221 -170 -480
ATOM   585   N    ARG  75  -6.567   19.099  47.387  1.000 12.72
ANISOU 585   N    ARG  75   1402    1702    1728    95 182  -108
ATOM   586   CA   ARG  75  -7.006   20.471  47.308  1.000 13.40
ANISOU 586   CA   ARG  75   1924    1618    1548    87 275  -193
ATOM   587   CB   ARG  75  -7.737   20.784  45.995  1.000 13.45
ANISOU 587   CB   ARG  75   1972    1387    1751    -179  51  - 9
ATOM   588   CG   ARG  75  -6.908   20.637  44.721  1.000 13.38
ANISOU 588   CG   ARG  75   1638    1851    1594    78 -217  1 0 1
ATOM   589   CD   ARG  75  -5.849   21.708  44.582  1.000 12.85
ANISOU 589   CD   ARG  75   1537    1602    1741    237   62  - 1 5
ATOM   590   NE   ARG  75  -5.087   21.685  43.347  1.000 13.71
ANISOU 590   NE   ARG  75   1708    1797    1705    188   90  - 9 1
ATOM   591   CZ   ARG  75  -3.984   21.036  43.013  1.000 12.46
ANISOU 591   CZ   ARG  75   1348    1656    1731    -89   86 1 1 7
ATOM   592   NH1  ARG  75  -3.418   20.241  43.894  1.000 14.64
ANISOU 592   NH1  ARG  75   1933    1794    1834    186  -91  6 5
ATOM   593   NH2  ARG  75  -3.444   21.167  41.794  1.000 13.72
ANISOU 593   NH2  ARG  75   1510    2037    1667    -136  84  - 8 3
ATOM   594   C    ARG  75  -7.948   20.787  48.475  1.000 12.74
ANISOU 594   C    ARG  75   1400    1656    1784    -209 214  - 464
ATOM   595   O    ARG  75  -8.780   19.944  48.818  1.000 14.60
ANISOU 595   O    ARG  75   1348    1926    2273    -427 156  - 480
ATOM   596   N    GLY  76  -7.830   21.955  49.078  1.000 11.92
ANISOU 596   N    GLY  76   1268    1537    1724    -22   34 -389
ATOM   597   CA   GLY  76  -8.801   22.395  50.070  1.000 12.44
ANISOU 597   CA   GLY  76   1439    1493    1796    -315 263  - 4 1 2
ATOM   598   C    GLY  76  -8.536   21.857  51.469  1.000 12.50
ANISOU 598   C    GLY  76   1324    1527    1900    5   326 - 273
ATOM   599   O    GLY  76  -7.388   21.517  51.769  1.000 14.25
ANISOU 599   O    GLY  76   1100    2099    2218    -277 239  - 2 2 5
ATOM   600   N    PHE  77  -9.574   21.840  52.287  1.000 12.65
ANISOU 600   N    PHE  77   1191    1806    1809    -162 231  - 3 5 1
ATOM   601   CA   PHE  77  -9.526   21.474  53.694  1.000 14.00
ANISOU 601   CA   PHE  77   1295    2110    1914    -260 276  - 1 3 8
ATOM   602   CB   PHE  77  -10.644  22.226  54.451  1.000 14.73
ANISOU 602   CB   PHE  77   1554    2169    1874    -402 485  - 3 1 7
ATOM   603   CG   PHE  77  -10.773  21.824  55.912  1.000 17.13
ANISOU 603   CG   PHE  77   1927    2730    1849    -374 378  - 2 4 3
ATOM   604   CD1  PHE  77  -9.949   22.369  56.886  1.000 19.49
ANISOU 604   CD1  PHE  77   2744    2700    1962    -119 219  - 7 8 9
ATOM   605   CD2  PHE  77  -11.730  20.902  56.309  1.000 19.13
ANISOU 605   CD2  PHE  77   2348    3068    1852    -501 864  - 1 6 5
ATOM   606   CE1  PHE  77  -10.068  21.973  58.217  1.000 19.75
ANISOU 606   CE1  PHE  77   2956    2381    2168    -174 -313 - 3 0 4
ATOM   607   CE2  PHE  77  -11.829  20.479  57.627  1.000 18.73
ANISOU 607   CE2  PHE  77   2565    2711    1841    -382 310  - 7 7
ATOM   603   CZ   PHE  77  -10.986  21.013  58.584  1.000 19.22
ANISOU 608   CZ   PHE  77   2378    2542    2382    98 13 - 364
ATOM   609   C    PHE  77  -9.668   19.976  53.924  1.000 13.73
ANISOU 609   C    PHE  77   1306    2096    1813    -368  21 - 2 0 4
ATOM   610   O    PHE  77  -10.520  19.313  53.291  1.000 16.02
ANISOU 610   O    PHE  77   1386    2508    2194    -470 -128 -425
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ATOM    611   N    THR  78   -8.869  19.439  54.852  1.000 14.33
ANISOU  611   N    THR  78    1543    2270    1629   -472  35 -49
ATOM    612   CA   THR  78   -9.034  18.053  55.276  1.000 15.80
ANISOU  612   CA   THR  78    1813    2310    1880   -508 -23  8 2
ATOM    613   CB   THR  78   -8.001  17.081  54.666  1.000 18.26
ANISOU  613   CB   THR  78    1583    2199    3158   -599 334  1 3 1
ATOM    614   OG1  THR  78   -7.924  17.323  53.266  1.000 21.81
ANISOU  614   OG1  THR  78    3351    1877    3057    -88 943  - 3 7 0
ATOM    615   CG2  THR  78   -8.419  15.634  54.888  1.000 20.35
ANISOU  615   CG2  THR  78    2855    2254    2622  -1119 1108 -7 0 7
ATOM    616   C    THR  78   -8.832  17.881  56.777  1.000 19.14
ANISOU  616   C    THR  78    2845    2479    1948  -1747 -471 169
ATOM    617   O    THR  78   -7.801  18.311  57.290  1.000 22.04
ANISOU  617   O    THR  78    2781    2889    2704  -1718 -985 763
ATOM    618   N    GLY  79   -9.730  17.203  57.484  1.000 19.20
ANISOU  618   N    GLY  79    2629    2823    1844  -1352 19  4 5
ATOM    619   CA   GLY  79   -9.429  15.695  58.819  1.000 16.69
ANISOU  619   CA   GLY  79    1800    2770    1771   -518 196  - 9 5
ATOM    620   C    GLY  79   -8.672  15.376  58.720  1.000 22.98
ANISOU  620   C    GLY  79    2381    2874    3477   -272 -289 -545
ATOM    621   O    GLY  79   -9.227  14.504  58.044  1.000 25.57
ANISOU  621   O    GLY  79    3683    2520    3514   -456 -974 -141
ATOM    622   N    LEU  80   -7.494  15.236  59.319  1.000 22.91
ANISOU  622   N    LEU  80    2412    2900    3392    30 -206  - 6 0 6
ATOM    623   CA   LEU  80   -6.644  14.081  59.072  1.000 25.08
ANISOU  623   CA   LEU  80    2848    2777    3904    206  621  3 6 1
ATOM    624   C    LEU  80   -6.372  13.294  60.370  1.000 24.30
ANISOU  624   C    LEU  80    2834    2762    3637   -300  480  2 0 0
ATOM    625   O    LEU  80   -5.729  13.812  61.291  1.000 25.14
ANISOU  625   O    LEU  80    2253    3017    4283    27 145  - 5
ATOM    626   CB   LEU  80   -5.318  14.480  58.415  1.000 27.16
ANISOU  626   CB   LEU  80    3057    3326    3937    379  918  6 4 1
ATOM    627   CG   LEU  80   -4.411  13.338  57.933  1.000 29.43
ANISOU  627   CG   LEU  80    3474    3505    4204    287  1260 173
ATOM    628   CD1  LEU  80   -5.145  12.438  56.956  1.000 38.31
ANISOU  628   CD1  LEU  80    5673    3891    4993  -1554 1987 -2 8 7
ATOM    629   CD2  LEU  80   -3.137  13.884  57.306  1.000 29.85
ANISOU  629   CD2  LEU  80    3502    3919    3920    125  1307 -2 6 4
ATOM    630   N    GLU  81   -6.853  12.055  60.396  1.000 25.58
ANISOU  630   N    GLU  81    2469    2759    4490   -196  -82  5 1 0
ATOM    631   CA   GLU  81   -6.739  11.038  61.415  1.000 25.98
ANISOU  631   CA   GLU  81    2739    2692    4441   -258  -55  4 2 4
ATOM    632   C    GLU  81   -5.299  10.536  61.562  1.000 26.28
ANISOU  632   C    GLU  81    2870    3268    3848    187  407  8 4 1
ATOM    633   O    GLU  81   -4.489  10.655  60.655  1.000 28.19
ANISOU  633   O    GLU  81    3709    3520    3483    253  799  - 5 4 4
ATOM    634   CB   GLU  81   -7.685   9.861  61.123  1.000 29.83
ANISOU  634   CB   GLU  81    3533    2894    4906   -770  270  1 8 1
ATOM    635   CG   GLU  81   -7.241   8.832  60.098  1.000 25.34
ANISOU  635   CG   GLU  81    1737    2915    4976    284  -1220 1 5 8
ATOM    636   CD   GLU  81   -7.568   9.156  58.649  1.000 27.00
ANISOU  636   CD   GLU  81    1841    3405    5012    475  -1887 -4 5 6
ATOM    637   OE1  GLU  81   -8.120  10.240  58.324  1.000 28.81
ANISOU  637   OE1  GLU  81    3444    3091    4413    322  -155 7 9 1
ATOM    638   OE2  GLU  81   -7.240   8.273  57.814  1.000 31.31
ANISOU  638   OE2  GLU  81    3514    3384    4999    162  352  1 0 0
ATOM    639   N    SER  82   -4.988   9.974  62.720  1.000 31.00
ANISOU  639   N    SER  82    3568    3780    4430    -65  -30  1 4 8 4
ATOM    640   CA   SER  82   -3.653   9.422  62.959  1.000 30.29
ANISOU  640   CA   SER  82    3692    3278    4540   -157  -515 1 0 1 1
ATOM    641   C    SER  82   -3.421   8.150  62.150  1.000 31.76
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ANISOU 641   C   SER  82   3995      3241      4831     -102  -1104  8 4 7
ATOM   642   O   SER  82   -4.313    7.728     61.397   1.000 34.01
ANISOU 642   O   SER  82   3193      3794      5935      458  -1188  1 3 4
ATOM   643   CB  SER  82   -3.463    9.167     64.452   1.000 34.74
ANISOU 643   CB  SER  82   4687      3907      4606     -232  -979   9 7 1
ATOM   644   OG  SER  82   -2.360    8.305     64.681   1.000 41.53
ANISOU 644   OG  SER  82   4922      5366      5490      236  -1958  9 7 0
ATOM   645   N   GLY  91   -17.230   9.498     70.136   1.000 42.64
ANISOU 645   N   GLY  91   4516      7599      4086    -2166   2340 - 4 2 7
ATOM   646   CA  GLY  91   -17.485  10.892     69.789   1.000 44.91
ANISOU 646   CA  GLY  91   6666      7702      2697    -4311  -1561  5 6 5
ATOM   647   C   GLY  91   -16.227  11.662     69.452   1.000 38.67
ANISOU 647   C   GLY  91   5455      7587      1652    -2821  -274  - 1 5 9
ATOM   648   O   GLY  91   -15.164  11.480     70.040   1.000 32.45
ANISOU 648   O   GLY  91   4241      4474      3616     -183   1152 - 4 3 9
ATOM   649   N   GLY  92   -16.332  12.558     68.474   1.000 31.97
ANISOU 649   N   GLY  92   3881      5904      2363    -1382   735  - 5 7 1
ATOM   650   CA  GLY  92   -15.232  13.412     68.075   1.000 33.02
ANISOU 650   CA  GLY  92   4121      6150      2274    -1716   851  - 9 5 6
ATOM   651   C   GLY  92   -15.223  13.696     66.572   1.000 26.22
ANISOU 651   C   GLY  92   2603      5046      2314     -885   741  - 9 4 7
ATOM   652   O   GLY  92   -16.289  13.666     65.939   1.000 23.91
ANISOU 652   O   GLY  92   2490      3396      3198     -680   548  - 5 6 7
ATOM   653   N   SER  93   -14.010  13.956     66.088   1.000 23.77
ANISOU 653   N   SER  93   2405      3917      2708     -372   736  - 5 6 0
ATOM   654   CA  SER  93   -13.801  14.287     64.690   1.000 23.41
ANISOU 654   CA  SER  93   2700      3292      2901     -386   970  - 3 9 9
ATOM   655   C   SER  93   -12.410  13.852     64.240   1.000 24.26
ANISOU 655   C   SER  93   2547      3908      2763     -286   833  - 2 2 4
ATOM   656   O   SER  93   -11.497  13.831     65.089   1.000 27.06
ANISOU 656   O   SER  93   3401      3536      3346      630    92  - 3 8 6
ATOM   657   CB  SER  93   -13.966  15.795     64.467   1.000 25.71
ANISOU 657   CB  SER  93   2811      3225      3735     -576   271  - 5 0 6
ATOM   658   OG  SER  93   -13.558  16.158     63.150   1.000 28.14
ANISOU 658   OG  SER  93   2694      3713      4284     -373   290   5 1 7
ATOM   659   N   TYR  94   -12.254  13.533     62.949   1.000 24.24
ANISOU 659   N   TYR  94   2786      3320      3104     -204   791  - 8 1 7
ATOM   660   CA  TYR  94   -10.878  13.262     62.498   1.000 23.94
ANISOU 660   CA  TYR  94   3089      2502      3505       95   1112 - 6 8 3
ATOM   661   C   TYR  94   -10.017  14.531     62.584   1.000 25.19
ANISOU 661   C   TYR  94   2601      2657      4312      147   737  - 6 2 5
ATOM   662   O   TYR  94   -8.786   14.421     62.694   1.000 30.11
ANISOU 662   O   TYR  94   2617      3095      5726      307   760   3 6
ATOM   663   CB  TYR  94   -10.800  12.659     61.098   1.000 25.64
ANISOU 663   CB  TYR  94   3566      2910      3267     -293   1331 - 5 2 5
ATOM   664   CG  TYR  94   -11.600  11.410     60.876   1.000 23.22
ANISOU 664   CG  TYR  94   3359      2768      2697      -69   784  - 2 7 4
ATOM   665   CD1 TYR  94   -12.451  11.455     59.777   1.000 26.01
ANISOU 665   CD1 TYR  94   4410      2730      2741      499   353  - 5 4 3
ATOM   666   CD2 TYR  94   -11.564  10.252     61.635   1.000 24.42
ANISOU 666   CD2 TYR  94   3117      2866      3297       73   458 - 1 4
ATOM   667   CE1 TYR  94   -13.243  10.407     59.443   1.000 28.75
ANISOU 667   CE1 TYR  94   4559      3328      3037      434   140  - 1 3 7 0
ATOM   668   CE2 TYR  94   -12.375   9.159     61.305   1.000 26.47
ANISOU 668   CE2 TYR  94   4707      2585      2764     -220   1227 - 7 1 8
ATOM   669   CZ  TYR  94   -13.209   9.247     60.212   1.000 29.70
ANISOU 669   CZ  TYR  94   5641      3518      2125    -1172   1103 - 1 4 4 7
ATOM   670   OH  TYR  94   -14.059   8.281     59.730   1.000 34.02
ANISOU 670   OH  TYR  94   3079      3962      5886     -423   1593 - 2 6 3 8
ATOM   671   N   SER  95   -10.628  15.714     62.561   1.000 22.61
ANISOU 671   N   SER  95   2460      2497      3632      -54    59  - 3 3 8
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ATOM      672  CA   SER  95     -9.924   16.975   62.750  1.00 22.54
ANISOU 672  CA   SER  95    2257     2603     3706     -120  -301 4 6
ATOM      673  C    SER  95     -9.370   17.106   64.163  1.00 23.58
ANISOU 673  C    SER  95    1811     3478     3671     -521   -88  - 8 5
ATOM      674  O    SER  95     -8.623   18.034   64.481  1.00 26.53
ANISOU 674  O    SER  95    2592     3242     4247     -469  -167 - 6 4 1
ATOM      675  CB   SER  95    -10.838   18.177   62.478  1.00 27.58
ANISOU 675  CB   SER  95    3657     2556     4264      365  -379 2 8
ATOM      676  OG   SER  95    -11.506   18.093   61.242  1.00 39.40
ANISOU 676  OG   SER  95    6336     4214     4421      900  -1445 1 4 4 2
ATOM      677  N    ASP  96     -9.712   16.194   65.060  1.00 25.04
ANISOU 677  N    ASP  96    2579     3688     3248     -399   277  - 2 3 2
ATOM      678  CA   ASP  96     -9.228   16.317   66.422  1.00 24.42
ANISOU 678  CA   ASP  96    2603     3347     3330     -470   257   - 5 2 6
ATOM      679  C    ASP  96     -7.735   16.050   66.501  1.00 24.45
ANISOU 679  C    ASP  96    2597     3228     3466     -471   162   - 3 8 3
ATOM      680  O    ASP  96     -7.073   16.589   67.404  1.00 26.51
ANISOU 680  O    ASP  96    2656     4047     3370     -170   160   - 7 9 8
ATOM      681  CB   ASP  96     -9.952   15.334   67.334  1.00 24.97
ANISOU 681  CB   ASP  96    2310     3806     3371     -423  -228 7 7
ATOM      682  CG   ASP  96    -11.411   15.605   67.606  1.00 26.77
ANISOU 682  CG   ASP  96    2272     4334     3566     -362  -240 7 1 6
ATOM      683  OD1  ASP  96    -11.935   16.723   67.388  1.00 33.94
ANISOU 683  OD1  ASP  96    3267     4894     4733      647   204  5 6 9
ATOM      684  OD2  ASP  96    -12.058   14.646   68.083  1.00 32.65
ANISOU 684  OD2  ASP  96    3624     4709     4072    -1032  1446 - 2 0 2
ATOM      685  N    TYR  97     -7.254   15.226   65.581  1.00 22.21
ANISOU 685  N    TYR  97    2292     3389     2760     -376   -77   - 1 0 2
ATOM      686  CA   TYR  97     -5.835   14.852   65.583  1.00 23.71
ANISOU 686  CA   TYR  97    2480     3542     2987      -27   106  6 4 4
ATOM      687  C    TYR  97     -5.026   15.828   64.743  1.00 23.06
ANISOU 687  C    TYR  97    2363     3754     2647     -410   -78  3 5 0
ATOM      688  O    TYR  97     -3.992   16.327   65.230  1.00 24.29
ANISOU 688  O    TYR  97    2205     3845     3178     -133  -230 7 4
ATOM      689  CB   TYR  97     -5.585   13.451   65.035  1.00 28.38
ANISOU 689  CB   TYR  97    3230     3324     4229      540  -450 8 3 2
ATOM      690  CG   TYR  97     -4.132   13.025   65.082  1.00 30.37
ANISOU 690  CG   TYR  97    3278     4101     4161      766  -191 6 7 1
ATOM      691  CD1  TYR  97     -3.511   12.691   66.285  1.00 30.19
ANISOU 691  CD1  TYR  97    2878     4475     4119     1106   151  9 5 1
ATOM      692  CD2  TYR  97     -3.370   12.945   63.922  1.00 29.79
ANISOU 692  CD2  TYR  97    3317     4005     3997       53  -253  5 4 4
ATOM      693  CE1  TYR  97     -2.178   12.294   66.324  1.00 32.77
ANISOU 693  CE1  TYR  97    2554     4771     5126      574   -68  7 6 3
ATOM      694  CE2  TYR  97     -2.043   12.553   63.955  1.00 32.68
ANISOU 694  CE2  TYR  97    3536     3793     5087      403   353  3 2 3
ATOM      695  CZ   TYR  97     -1.445   12.228   65.157  1.00 33.00
ANISOU 695  CZ   TYR  97    2633     4284     5622     1066   264  4 5 6
ATOM      696  OH   TYR  97     -0.121   11.845   65.156  1.00 42.66
ANISOU 696  OH   TYR  97    2572     5373     8264     1161   764  1 2 7 7
ATOM      697  CB   SER  98     -3.465   16.575   62.134  1.00 23.20
ANISOU 697  CB   SER  98    2461     2766     3587      105     2  - 5 4 4
ATOM      698  OG   SER  98     -3.632   15.649   61.078  1.00 26.49
ANISOU 698  OG   SER  98    3824     3059     3180     -154   238  - 4 5 7
ATOM      699  C    SER  98     -5.694   17.744   61.701  1.00 18.66
ANISOU 699  C    SER  98    2301     2150     2637     -295    66 1 3
ATOM      700  O    SER  98     -6.768   17.212   61.413  1.00 20.88
ANISOU 700  O    SER  98    3042     2245     2646     -945  -249 1 8 1
ATOM      701  N    SER  98     -5.457   16.110   63.511  1.00 23.62
ANISOU 701  N    SER  98    2816     3227     2931     -441  -395 6 0 5
ATOM      702  CA   SER  98     -4.748   17.143   62.741  1.00 21.31
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ANISOU  702  CA   SER  98  2430     2687     2982      133    153   2 9 4
ATOM    703  N    MET  99  -5.307   18.891   61.148   1.000 18.68
ANISOU  703  N    MET  99  2392     2722     1984     -978   -366 1 0 1
ATOM    704  CA   MET  99  -6.047   19.560   60.075   1.000 17.84
ANISOU  704  CA   MET  99  2431     2620     1726     -945   -212 - 1 7
ATOM    705  CB   MET  99  -6.819   20.779   60.585   1.000 19.71
ANISOU  705  CB   MET  99  2348     2968     2173     -679    25 6 4
ATOM    706  CG   MET  99  -8.052   20.392   61.374   1.000 23.68
ANISOU  706  CG   MET  99  2360     3055     3582     -504    393  4 8 9
ATOM    707  SD   MET  99  -9.031   21.821   61.911   1.000 22.33
ANISOU  707  SD   MET  99  2569     3383     2534     -522    170  - 1 2 0
ATOM    708  CE   MET  99  -8.148   22.225   63.419   1.000 36.98
ANISOU  708  CE   MET  99  6485     4165     3401     -225   -1904 - 2 3
ATOM    709  C    MET  99  -5.070   19.954   58.973   1.000 17.19
ANISOU  709  C    MET  99  2269     2488     1776     -960   -194 - 2 0 1
ATOM    710  O    MET  99  -3.964   20.341   59.324   1.000 16.93
ANISOU  710  O    MET  99  1932     2583     1919     -367   -208 - 2 4 1
ATOM    711  N    CYS  100 -5.486   19.864   57.715   1.000 20.00
ANISOU  711  N    CYS  100 3178     2683     1739     -1753  -358 1 6 6
ATOM    712  CA   CYS  100 -4.645   20.181   56.554   1.000 16.64
ANISOU  712  CA   CYS  100 2213     2294     1817     -924   -563 4 6 8
ATOM    713  CB   CYS  100 -4.291   18.893   55.813   1.000 17.74
ANISOU  713  CB   CYS  100 2161     2174     2407      560   -765 1 0 5 3
ATOM    714  SG   CYS  100 -3.035   18.928   54.552   1.000 33.56
ANISOU  714  SG   CYS  100 5244     3511     3997      414    1509 6 0 1
ATOM    715  C    CYS  100 -5.347   21.121   55.590   1.000 13.48
ANISOU  715  C    CYS  100 1879     1415     1829     -68     240  - 9 1
ATOM    716  O    CYS  100 -6.585   21.127   55.496   1.000 14.49
ANISOU  716  O    CYS  100 1880     1952     1673     -497   -57  1 4
ATOM    717  N    TYR  101 -4.589   21.921   54.852   1.000 13.35
ANISOU  717  N    TYR  101 1721     1677     1673     -254   -78   4 9
ATOM    718  CA   TYR  101 -5.016   22.753   53.755   1.000 10.27
ANISOU  718  CA   TYR  101 926 1498      1477     -15     -141 - 2 3 1
ATOM    719  CB   TYR  101 -5.102   24.265   54.124   1.000 13.60
ANISOU  719  CB   TYR  101 1626     1513     2027     -48     322  - 2 3 6
ATOM    720  CG   TYR  101 -5.498   25.025   52.863   1.000 17.31
ANISOU  720  CG   TYR  101 2373     1509     2694     -158   -103 1 9 3
ATOM    721  CD1  TYR  101 -6.815   25.068   52.519   1.000 16.38
ANISOU  721  CD1  TYR  101 2464     752  3006      190    -227  5 5
ATOM    722  CE1  TYR  101 -7.307   25.715   51.412   1.000 17.01
ANISOU  722  CE1  TYR  101 2755     714  2993     -86     -416 1 2 2
ATOM    723  CD2  TYR  101 -4.616   25.679   52.012   1.000 19.51
ANISOU  723  CD2  TYR  101 3032     1533     2847     -1143  -594 4 7 5
ATOM    724  CE2  TYR  101 -5.065   26.321   50.872   1.000 20.96
ANISOU  724  CE2  TYR  101 2802     1949     3211      238    112  7 6 9
ATOM    725  CZ   TYR  101 -6.414   26.334   50.568   1.000 22.78
ANISOU  725  CZ   TYR  101 3238     2291     3126     -1228  -919 6 2 4
ATOM    726  OH   TYR  101 -6.875   26.986   49.442   1.000 23.10
ANISOU  726  OH   TYR  101 3141     3112     2522     -14    -129 4 2 9
ATOM    727  C    TYR  101 -4.041   22.518   52.596   1.000 11.25
ANISOU  727  C    TYR  101 1223     1398     1654     -323   103  - 2 5 2
ATOM    728  O    TYR  101 -2.823   22.677   52.787   1.000 12.23
ANISOU  728  O    TYR  101 1114     1750     1784     -87     130  - 2 0
ATOM    729  N    SER  102 -4.542   22.190   51.405   1.000 11.17
ANISOU  729  N    SER  102 1355     1279     1611     -220   145  - 2 6 3
ATOM    730  CA   SER  102 -3.752   21.802   50.235   1.000 10.46
ANISOU  730  CA   SER  102 1144     1263     1568      62 -1 - 1 2 5
ATOM    731  CB   SER  102 -4.027   20.343   49.908   1.000 13.46
ANISOU  731  CB   SER  102 1668     1212     2234      324    105  - 3 0 1
ATOM    732  OG   SER  102 -3.723   19.487   51.025   1.000 16.42
ANISOU  732  OG   SER  102 2291     1313     2637     -122   -43  9 6
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ATOM     733  C    SER  102  -4.046   22.668   49.008   1.000 11.74
ANISOU   733  C    SER  102  1346     1500     1614      18 -39  - 1 0
ATOM     734  O    SER  102  -5.148   23.148   48.784   1.000 12.84
ANISOU   734  O    SER  102  1480     1410     1988      90 -66  249
ATOM     735  N    MET  103  -3.004   22.871   48.187   1.000 12.33
ANISOU   735  N    MET  103  1554     1722     1409    -262  -10  -246
ATOM     736  CA   MET  103  -3.188   23.603   46.938   1.000 12.92
ANISOU   736  CA   MET  103  1663     1681     1565      22 47  - 7 0
ATOM     737  CB   MET  103  -3.215   25.122   47.179   1.000 17.51
ANISOU   737  CB   MET  103  2439     1634     2579    -363 812  - 4 4
ATOM     738  CG   MET  103  -1.929   25.808   47.549   1.000 20.07
ANISOU   738  CG   MET  103  2509     1470     3646    -538 688  376
ATOM     739  SD   MET  103  -2.136   27.614   47.689   1.000 18.10
ANISOU   739  SD   MET  103  2235     1665     2975      -3 -334  - 3 5 2
ATOM     740  CE   MET  103  -2.365   28.068   45.991   1.000 18.09
ANISOU   740  CE   MET  103  2319     1457     3098    -187 -718  -2 1 4
ATOM     741  C    MET  103  -2.152   23.221   45.892   1.000 12.57
ANISOU   741  C    MET  103  1420     1837     1519     119  -53  2 3 8
ATOM     742  O    MET  103  -1.120   22.573   46.175   1.000 12.57
ANISOU   742  O    MET  103  1094     1891     1792    -155  -165 276
ATOM     743  N    GLY  104  -2.418   23.650   44.655   1.000 12.83
ANISOU   743  N    GLY  104  1493     1958     1422     237  -124  - 3 4
ATOM     744  CA   GLY  104  -1.533   23.459   43.513   1.000 12.65
ANISOU   744  CA   GLY  104  1075     2188     1544     -93  -37  2 4 2
ATOM     745  C    GLY  104  -1.624   24.622   42.542   1.000 14.36
ANISOU   745  C    GLY  104  1909     1985     1561    -265  -294 142
ATOM     746  O    GLY  104  -2.033   25.700   42.967   1.000 15.69
ANISOU   746  O    GLY  104  1628     2273     2060     163  -197 2 1 3
ATOM     747  N    THR  105  -1.242   24.397   41.276   1.000 14.52
ANISOU   747  N    THR  105  1829     2182     1504     -59  -375 3 1 9
ATOM     748  CA   THR  105  -1.218   25.452   40.279   1.000 15.27
ANISOU   748  CA   THR  105  1977     2223     1603    -105  -363 365
ATOM     749  CB   THR  105  -0.359   25.083   39.039   1.000 15.61
ANISOU   749  CB   THR  105  1936     2122     1873     -37  -106 5 5 4
ATOM     750  OG1  THR  105  -0.884   23.876   38.446   1.000 16.16
ANISOU   750  OG1  THR  105  1738     2260     2140     217  -285 151
ATOM     751  CG2  THR  105   1.092   24.882   39.369   1.000 17.47
ANISOU   751  CG2  THR  105  1918     2871     1847    -293  -227 5 2 7
ATOM     752  C    THR  105  -2.603   25.828   39.755   1.000 14.73
ANISOU   752  C    THR  105  1989     1694     1913     122  -340 199
ATOM     753  O    THR  105  -2.730   26.921   39.174   1.000 19.91
ANISOU   753  O    THR  105  2579     2355     2632      23 -437  1 0 0 4
ATOM     754  N    ALA  106  -3.587   24.960   39.913   1.000 16.57
ANISOU   754  N    ALA  106  1836     2413     2047       2  -260  6 6 1
ATOM     755  CA   ALA  106  -4.975   25.167   39.465   1.000 14.94
ANISOU   755  CA   ALA  106  1975     1904     1798     105  -456 3 6 5
ATOM     756  CB   ALA  106  -5.054   24.945   37.965   1.000 17.75
ANISOU   756  CB   ALA  106  2006     2862     1876     140  -201 - 3 2
ATOM     757  C    ALA  106  -5.942   24.251   40.222   1.000 16.26
ANISOU   757  C    ALA  106  1710     2174     2293     327  -127 4 9 1
ATOM     758  O    ALA  106  -5.498   23.398   41.013   1.000 14.57
ANISOU   758  O    ALA  106  1622     1971     1945     213  -21  3 3 7
ATOM     759  N    ASP  107  -7.253   24.410   40.008   1.000 16.71
ANISOU   759  N    ASP  107  1768     2096     2485     540  -22  3 0 4
ATOM     760  CA   ASP  107  -8.310   23.638   40.633   1.000 16.10
ANISOU   760  CA   ASP  107  1696     2175     2246      51 -485  - 1 4
ATOM     761  CB   ASP  107  -8.231   22.171   40.211   1.000 17.09
ANISOU   761  CB   ASP  107  1299     2385     2808     144  -203 - 3 9 9
ATOM     762  CG   ASP  107  -8.418   21.966   38.720   1.000 21.54
ANISOU   762  CG   ASP  107  2385     2894     2906      84 -317  - 7 2 2
ATOM     763  OD1  ASP  107  -9.452   22.445   38.189   1.000 23.92
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ANISOU  763  OD1  ASP  107  3447      2970      2672      698    -753 - 772
ATOM    764  OD2  ASP  107  -7.563    21.311    38.080    1.000 24.88
ANISOU  764  OD2  ASP  107  2496      4004      2954      105    244  - 679
ATOM    765  C    ASP  107  -8.285    23.785    42.160    1.000 14.16
ANISOU  765  C    ASP  107  1261      1918      2201      237    -447 153
ATOM    766  O    ASP  107  -8.507    22.850    42.936    1.000 16.67
ANISOU  766  O    ASP  107  2017      1927      2390      -189   -193 9 7
ATOM    767  N    ASN  108  -8.027    25.020    42.598    1.000 15.34
ANISOU  767  N    ASN  108  2093      1866      1870      82 51  2 39
ATOM    768  CA   ASN  108  -7.967    25.314    44.031    1.000 13.68
ANISOU  768  CA   ASN  108  1479      1823      1898      153    107  2 57
ATOM    769  CB   ASN  108  -6.925    26.420    44.272    1.000 15.60
ANISOU  769  CB   ASN  108  1593      2026      2309      16 267 - 98
ATOM    770  CG   ASN  108  -5.516    25.942    43.963    1.000 15.23
ANISOU  770  CG   ASN  108  1505      2141      2142      5   -53 2
ATOM    771  OD1  ASN  108  -5.086    24.932    44.505    1.000 15.40
ANISOU  771  OD1  ASN  108  1412      2442      1998      -5 -239  18 8
ATOM    772  ND2  ASN  108  -4.823    26.678    43.094    1.000 16.96
ANISOU  772  ND2  ASN  108  1593      2198      2652      339    393  2 22
ATOM    773  C    ASN  108  -9.310    25.708    44.642    1.000 14.55
ANISOU  773  C    ASN  108  1471      1937      2120      261    191  5 26
ATOM    774  O    ASN  108  -10.222   26.170    43.958    1.000 16.89
ANISOU  774  O    ASN  108  1861      2336      2219      716    -109 1 4
ATOM    775  N    LEU  109  -9.412    25.512    45.954    1.000 13.42
ANISOU  775  N    LEU  109  1458      1648      1994      179    130  9
ATOM    776  CA   LEU  109  -10.602   25.796    46.769    1.000 13.53
ANISOU  776  CA   LEU  109  1094      2122      1923      -52    -86  - 256
ATOM    777  CB   LEU  109  -11.187   24.499    47.331    1.000 14.50
ANISOU  777  CB   LEU  109  1382      1959      2169      119    455  - 468
ATOM    778  CG   LEU  109  -11.580   23.383    46.370    1.000 15.21
ANISOU  778  CG   LEU  109  1593      1785      2403      235    63 - 342
ATOM    779  CD1  LEU  109  -11.931   22.083    47.089    1.000 18.26
ANISOU  779  CD1  LEU  109  2460      1674      2806      382    -414 - 94
ATOM    780  CD2  LEU  109  -12.780   23.783    45.529    1.000 22.36
ANISOU  780  CD2  LEU  109  3055      2391      3052      44 -1155 2 88
ATOM    781  C    LEU  109  -10.203   26.794    47.840    1.000 13.54
ANISOU  781  C    LEU  109  1179      1989      1979      76 -116  - 259
ATOM    782  O    LEU  109  -9.416    26.428    48.717    1.000 16.15
ANISOU  782  O    LEU  109  2196      2210      1730      -52    -366 3 2
ATOM    783  N    PHE  110  -10.706   28.025    47.786    1.000 16.11
ANISOU  783  N    PHE  110  1369      2042      2709      105    -118 - 288
ATOM    784  CA   PHE  110  -10.298   29.079    48.732    1.000 17.05
ANISOU  784  CA   PHE  110  1626      1801      3050      -116   259  - 362
ATOM    785  CB   PHE  110  -9.660    30.259    47.991    1.000 17.94
ANISOU  785  CB   PHE  110  1423      2366      3027      -290   228  - 129
ATOM    786  CG   PHE  110  -8.425    29.972    47.165    1.000 20.32
ANISOU  786  CG   PHE  110  1702      2650      3368      -176   459  - 385
ATOM    787  CD1  PHE  110  -7.257    29.598    47.793    1.000 20.35
ANISOU  787  CD1  PHE  110  1885      2462      3387      461    573  - 707
ATOM    788  CD2  PHE  110  -8.405    30.110    45.789    1.000 20.31
ANISOU  788  CD2  PHE  110  2073      2226      3419      512    712  - 264
ATOM    789  CE1  PHE  110  -6.102    29.347    47.065    1.000 19.49
ANISOU  789  CE1  PHE  110  1958      2116      3332      176    749  - 631
ATOM    790  CE2  PHE  110  -7.288    29.846    45.050    1.000 20.65
ANISOU  790  CE2  PHE  110  2158      2094      3596      758    724  - 321
ATOM    791  CZ   PHE  110  -6.118    29.496    45.694    1.000 19.43
ANISOU  791  CZ   PHE  110  1925      2131      3327      219    542  - 780
ATOM    792  C    PHE  110  -11.495   29.556    49.538    1.000 17.08
ANISOU  792  C    PHE  110  1774      1806      2911      -74    414  - 111
ATOM    793  O    PHE  110  -12.562   29.792    48.929    1.000 21.26
ANISOU  793  O    PHE  110  1849      2577      3650      405    178  - 448
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ATOM    794  N   PRO 111 -11.406 29.717 50.851 1.000 19.41
ANISOU  794  N   PRO 111  2279    2110   2985  -386  519  -314
ATOM    795  CD  PRO 111 -10.278 29.322 51.705 1.000 19.20
ANISOU  795  CD  PRO 111  2773    1880   2640  -417  255  -514
ATOM    796  CA  PRO 111 -12.549 30.252 51.604 1.000 21.47
ANISOU  796  CA  PRO 111  3026    1924   3206   -50  728  -635
ATOM    797  CB  PRO 111 -12.167 30.007 53.055 1.000 23.63
ANISOU  797  CB  PRO 111  3789    2054   3137   334  776  -575
ATOM    798  CG  PRO 111 -10.775 29.535 53.100 1.000 22.33
ANISOU  798  CG  PRO 111  2767    2908   2809 -1006  623  -414
ATOM    799  C   PRO 111 -12.828 31.739 51.433 1.000 23.88
ANISOU  799  C   PRO 111  3139    2049   3887    79 -142  -479
ATOM    800  O   PRO 111 -13.919 32.194 51.834 1.000 26.77
ANISOU  800  O   PRO 111  3800    2818   3555   992  -91  -397
ATOM    801  N   SER 112 -11.906 32.517 50.872 1.000 25.19
ANISOU  801  N   SER 112  3514    2269   3788  -247 -856  282
ATOM    802  CA  SER 112 -12.300 33.919 50.631 1.000 26.43
ANISOU  802  CA  SER 112  2654    2655   4734   496 1364  456
ATOM    803  CB  SER 112 -12.506 34.712 51.912 1.000 33.37
ANISOU  803  CB  SER 112  3122    3663   5895   172 2582 -510
ATOM    804  OG  SER 112 -11.322 34.719 52.688 1.000 36.94
ANISOU  804  OG  SER 112  6530    2154   5351  1399  206 -415
ATOM    805  C   SER 112 -11.262 34.587 49.723 1.000 26.62
ANISOU  805  C   SER 112  2613    2546   4956  1021 1668  651
ATOM    806  O   SER 112 -10.219 34.029 49.414 1.000 22.81
ANISOU  806  O   SER 112  2241    2782   3645   800  837 -400
ATOM    807  N   GLY 113 -11.570 35.802 49.279 1.000 28.93
ANISOU  807  N   GLY 113  2937    2947   5108  1008 1175 1198
ATOM    808  CA  GLY 113 -10.659 36.478 48.365 1.000 30.79
ANISOU  808  CA  GLY 113  2992    3606   5102   381  798 1400
ATOM    809  C   GLY 113  -9.362 36.829 49.070 1.000 31.83
ANISOU  809  C   GLY 113  3297    3919   4878   262  897  528
ATOM    810  O   GLY 113  -8.294 36.790 48.459 1.000 25.85
ANISOU  810  O   GLY 113  2920    2317   4585   857  450 -203
ATOM    811  N   ASP 114  -9.479 37.145 50.365 1.000 29.56
ANISOU  811  N   ASP 114  3487    2877   4868   866 1104  760
ATOM    812  CA  ASP 114  -8.257 37.463 51.122 1.000 26.15
ANISOU  812  CA  ASP 114  3189    2680   4066  1028 1584  542
ATOM    813  CB  ASP 114  -8.628 37.937 52.526 1.000 33.81
ANISOU  813  CB  ASP 114  5580    2697   4569  1774 1691 -240
ATOM    814  CG  ASP 114  -7.904 39.232 52.840 1.000 40.77
ANISOU  814  CG  ASP 114  6798    3734   4960   719  693 -248
ATOM    815  OD1 ASP 114  -8.330 40.277 52.295 1.000 48.61
ANISOU  815  OD1 ASP 114  6014    2534   9920  1703  931 -913
ATOM    816  OD2 ASP 114  -6.932 39.178 53.622 1.000 54.35
ANISOU  816  OD2 ASP 114  5258    7609   7783  -868  495 1602
ATOM    817  C   ASP 114  -7.310 36.281 51.231 1.000 23.05
ANISOU  817  C   ASP 114  2621    2102   4033   444 1874  340
ATOM    818  O   ASP 114  -6.111 36.371 50.955 1.000 22.05
ANISOU  818  O   ASP 114  2423    2277   3677   131 1411 -461
ATOM    819  N   PHE 115  -7.854 35.160 51.637 1.000 23.21
ANISOU  819  N   PHE 115  2945    1890   3984  -130 1293 -228
ATOM    820  CA  PHE 115  -7.120 33.896 51.690 1.000 19.93
ANISOU  820  CA  PHE 115  2562    1908   3102  -198  655 -294
ATOM    821  CB  PHE 115  -8.085 32.792 52.157 1.000 19.49
ANISOU  821  CB  PHE 115  2378    1754   3275    64  881 -314
ATOM    822  CG  PHE 115  -7.523 31.445 52.540 1.000 17.25
ANISOU  822  CG  PHE 115  2053    1589   2912   -56  348 -695
ATOM    823  CD1 PHE 115  -7.637 30.951 53.833 1.000 19.00
ANISOU  823  CD1 PHE 115  2728    1539   2950    73  496 -683
ATOM    824  CD2 PHE 115  -6.868 30.634 51.615 1.000 17.88
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ANISOU 824  CD2 PHE  115 1933      1931      2927       7  298 - 8 1 0
ATOM    825  CE1 PHE  115 -7.100   29.711    54.163     1.000 20.25
ANISOU 825  CE1 PHE  115 2825      1825      3042       317  341  - 5 7 5
ATOM    826  CE2 PHE  115 -6.338   29.412    51.955     1.000 19.11
ANISOU 826  CE2 PHE  115 1865      2158      3237       336  351  - 8 8 5
ATOM    827  CZ  PHE  115 -6.452   28.936    53.233     1.000 19.39
ANISOU 827  CZ  PHE  115 2068      1910      3390       320  248  - 6 6 9
ATOM    828  C   PHE  115 -6.506   33.624    50.327     1.000 17.86
ANISOU 828  C   PHE  115 1964      1945      2878       61 344 1 6
ATOM    829  O   PHE  115 -5.324   33.315    50.271     1.000 17.34
ANISOU 829  O   PHE  115 1868      2107      2613       -132  179  1 5 7
ATOM    830  N   GLU  116 -7.310   33.683    49.263     1.000 18.21
ANISOU 830  N   GLU  116 1921      1934      3065       547  281  6 2
ATOM    831  CA  GLU  116 -6.848   33.387    47.907     1.000 19.99
ANISOU 831  CA  GLU  116 2128      2618      2851       81 231 2 2 2
ATOM    832  CB  GLU  116 -7.968   33.605    46.884     1.000 18.61
ANISOU 832  CB  GLU  116 2058      1952      3060       231  244  2 7 0
ATOM    833  CG  GLU  116 -7.396   33.378    45.482     1.000 18.61
ANISOU 833  CG  GLU  116 1813      2288      2971       295  -32  - 3 3
ATOM    834  CD  GLU  116 -8.442   33.230    44.412     1.000 22.40
ANISOU 834  CD  GLU  116 1908      3193      3410       -122  -278 - 9 1
ATOM    835  OE1 GLU  116 -9.654   33.272    44.678     1.000 30.82
ANISOU 835  OE1 GLU  116 1793      4465      5452       273  -414 - 2 4
ATOM    836  OE2 GLU  116 -8.085   33.063    43.225     1.000 30.24
ANISOU 836  OE2 GLU  116 3333      5132      3026       382  -658 3 2 7
ATOM    837  C   GLU  116 -5.620   34.211    47.535     1.000 18.82
ANISOU 837  C   GLU  116 2090      2069      2990       294  119  4 8 7
ATOM    838  O   GLU  116 -4.605   33.701    47.049     1.000 17.41
ANISOU 838  O   GLU  116 2228      1780      2606       45 259 2 8 2
ATOM    839  N   ARG  117 -5.660   35.508    47.777     1.000 21.02
ANISOU 839  N   ARG  117 2313      2185      3487       408  220  9 0
ATOM    840  CA  ARG  117 -4.560   36.420    47.431     1.000 21.35
ANISOU 840  CA  ARG  117 2337      1800      3976       466  147  - 3 1
ATOM    841  C   ARG  117 -3.291   36.054    48.192     1.000 20.52
ANISOU 841  C   ARG  117 2292      2124      3380       353  288  - 1 0
ATOM    842  O   ARG  117 -2.186   35.969    47.636     1.000 18.96
ANISOU 842  O   ARG  117 2223      1664      3316       138  318  2 3 1
ATOM    843  CB  ARG  117 -4.971   37.885    47.693     1.000 25.59
ANISOU 843  CB  ARG  117 3237      1900      4587       929  1882 6 3 2
ATOM    844  CG  ARG  117 -3.881   38.908    47.478     1.000 32.57
ANISOU 844  CG  ARG  117 5212      1925      5237       -281  1083 6 2 3
ATOM    845  CD  ARG  117 -4.325   40.323    47.859     1.000 36.56
ANISOU 845  CD  ARG  117 6009      2157      5724       149  1774 6 6 3
ATOM    846  NE  ARG  117 -5.162   40.335    49.056     1.000 44.43
ANISOU 846  NE  ARG  117 7200      3742      5940       -96  2344 - 1 5
ATOM    847  CZ  ARG  117 -4.763   40.501    50.306     1.000 45.48
ANISOU 847  CZ  ARG  117 6422      4804      6054       -370  2388 - 2 8 3
ATOM    848  NH1 ARG  117 -3.484   40.683    50.619     1.000 53.21
ANISOU 848  NH1 ARG  117 6867      6451      6900       -2543 2487 3 5 4
ATOM    849  NH2 ARG  117 -5.647   40.487    51.301     1.000 50.00
ANISOU 849  NH2 ARG  117 6265      6511      6220       224  2433 -1534
ATOM    850  N   ILE  118 -3.439   35.832    49.493     1.000 19.30
ANISOU 850  N   ILE  118 2275      1838      3221       128  407  - 6 4 5
ATOM    851  CA  ILE  118 -2.275   35.527    50.331     1.000 18.25
ANISOU 851  CA  ILE  118 2376      1745      2811       78 530 - 4 4 9
ATOM    852  CB  ILE  118 -2.665   35.597    51.820     1.000 18.24
ANISOU 852  CB  ILE  118 2201      1726      3003       346  906  - 3 0 6
ATOM    853  CG2 ILE  118 -1.712   34.851    52.732     1.000 18.49
ANISOU 853  CG2 ILE  118 2077      2158      2792       -202  308  - 5 3 0
ATOM    854  CG1 ILE  118 -2.877   37.031    52.368     1.000 24.69
ANISOU 854  CG1 ILE  118 4436      1808      3136       284  1382 - 4 1 4
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ATOM    855  CD1 ILE   118  -3.786  37.025  53.582  1.000 29.63
ANISOU  855  CD1 ILE   118  6169    3096    1994     189   1258 -1068
ATOM    856  C   ILE   118  -1.692  34.172  49.959  1.000 15.65
ANISOU  856  C   ILE   118  2316    1549    2082     -89    573  - 117
ATOM    857  O   ILE   118  -0.463  34.035  49.802  1.000 14.59
ANISOU  857  O   ILE   118  2240    1255    2051      16  286  214
ATOM    858  N   TRP   119  -2.523  33.139  49.784  1.000 14.44
ANISOU  858  N   TRP   119  2125    1592    1771      47  128  - 71
ATOM    859  CA  TRP   119  -2.010  31.795  49.518  1.000 13.68
ANISOU  859  CA  TRP   119  1712    1529    1957     -61  220   4  0
ATOM    860  CB  TRP   119  -3.089  30.755  49.932  1.000 14.93
ANISOU  860  CB  TRP   119  1819    1729    2123    -234  295  - 35
ATOM    861  CG  TRP   119  -2.864  30.482  51.420  1.000 16.19
ANISOU  861  CG  TRP   119  1640    2364    2146    -168  582  1 67
ATOM    862  CD2 TRP   119  -2.116  29.430  51.993  1.000 20.41
ANISOU  862  CD2 TRP   119  3189    2414    2151     202  523  4 05
ATOM    863  CE2 TRP   119  -2.177  29.580  53.392  1.000 19.84
ANISOU  863  CE2 TRP   119  3536    1818    2184    -439  234  1 37
ATOM    864  CE3 TRP   119  -1.390  28.357  51.456  1.000 23.94
ANISOU  864  CE3 TRP   119  5382    1647    2068     561  126  4 00
ATOM    865  CD1 TRP   119  -3.340  31.223  52.460  1.000 20.05
ANISOU  865  CD1 TRP   119  3207    2343    2069      -9  189 -139
ATOM    866  NE1 TRP   119  -2.938  30.689  53.649  1.000 20.32
ANISOU  866  NE1 TRP   119  2806    2726    2188     -96  -68  - 185
ATOM    867  CZ2 TRP   119  -1.547  28.714  54.281  1.000 22.12
ANISOU  867  CZ2 TRP   119  4071    2256    2078     -17  105   2  2
ATOM    868  CZ3 TRP   119  -0.761  27.490  52.332  1.000 21.52
ANISOU  868  CZ3 TRP   119  4214    2168    1794     311  -193 1 97
ATOM    869  CH2 TRP   119  -0.847  27.674  53.715  1.000 24.34
ANISOU  869  CH2 TRP   119  5349    2047    1850     329  148  1 83
ATOM    870  C   TRP   119  -1.521  31.634  48.095  1.000 14.27
ANISOU  870  C   TRP   119  2180    1259    1985    -187  334  - 65
ATOM    871  O   TRP   119  -0.569  30.865  47.855  1.000 14.73
ANISOU  871  O   TRP   119  1996    1653    1946     -67  362  1 01
ATOM    872  N   THR   120  -2.109  32.325  47.116  1.000 13.99
ANISOU  872  N   THR   120  2231    1237    1848     106  627  - 137
ATOM    873  CA  THR   120  -1.541  32.275  45.762  1.000 15.19
ANISOU  873  CA  THR   120  1903    2093    1774       9  435 -242
ATOM    874  CB  THR   120  -2.492  32.983  44.787  1.000 16.41
ANISOU  874  CB  THR   120  1934    2304    1995    -331  152   6  6
ATOM    875  OG1 THR   120  -3.738  32.297  44.766  1.000 18.53
ANISOU  875  OG1 THR   120  1891    2288    2863    -236  195  4 07
ATOM    876  CG2 THR   120  -1.974  32.906  43.358  1.000 18.02
ANISOU  876  CG2 THR   120  2135    2602    2108     324  322  3 18
ATOM    877  C   THR   120  -0.145  32.870  45.727  1.000 14.19
ANISOU  877  C   THR   120  1868    2050    1475      87  285 -167
ATOM    878  O   THR   120   0.756  32.299  45.078  1.000 13.62
ANISOU  878  O   THR   120  1864    1692    1620     301  354  2 17
ATOM    879  N   GLN   121   0.114  33.962  46.429  1.000 14.55
ANISOU  879  N   GLN   121  1721    1672    2136     304  175  - 67
ATOM    880  CA  GLN   121   1.459  34.548  46.483  1.000 15.80
ANISOU  880  CA  GLN   121  2067    1666    2271     -18  -119 3 62
ATOM    881  C   GLN   121   2.465  33.642  47.176  1.000 13.73
ANISOU  881  C   GLN   121  1747    1665    1806     -30   18 1 14
ATOM    882  O   GLN   121   3.603  33.452  46.685  1.000 15.36
ANISOU  882  O   GLN   121  2063    1688    2084      48  360 - 44
ATOM    883  CB  GLN   121   1.315  35.918  47.154  1.000 18.85
ANISOU  883  CB  GLN   121  2537    1426    3200     -73   -5 3 56
ATOM    884  CG  GLN   121   2.639  36.558  47.543  1.000 18.88
ANISOU  884  CG  GLN   121  2507    1788    2878      59  9  -248
ATOM    885  CD  GLN   121   3.468  36.936  46.337  1.000 20.70
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ANISOU  885  CD   GLN  121 2584      2138     3142   -373   -85   2 3 1
ATOM    886  OE1  GLN  121 2.935    37.088   45.224  1.000 22.47
ANISOU  886  OE1  GLN  121 2695      2822     3019   -245    0    1 2 1
ATOM    887  NE2  GLN  121 4.779    37.101   46.522  1.000 25.22
ANISOU  887  NE2  GLN  121 2426      3344     3811    127  -131 1 3 8 5
ATOM    888  N    TYR  122 2.081    33.054   48.299  1.000 12.26
ANISOU  888  N    TYR  122 1747      1514     1399     99   -55  - 2 5 8
ATOM    889  CA   TYR  122 2.896    32.102   49.050  1.000 13.18
ANISOU  889  CA   TYR  122 1901      1643     1464    -20  -253  - 1 6 0
ATOM    890  CB   TYR  122 2.211    31.724   50.364  1.000 13.78
ANISOU  890  CB   TYR  122 2045      1435     1756    116    48  - 2 8
ATOM    891  CG   TYR  122 2.994    30.808   51.282  1.000 14.22
ANISOU  891  CG   TYR  122 1966      1681     1758    101    68  1 0 1
ATOM    892  CD1  TYR  122 4.271    31.120   51.722  1.000 17.48
ANISOU  892  CD1  TYR  122 1788      1972     2882    149    -5  4 2 0
ATOM    893  CE1  TYR  122 5.003    30.284   52.576  1.000 18.55
ANISOU  893  CE1  TYR  122 2131      2050     2868    102  -404  2 5 1
ATOM    894  CD2  TYR  122 2.445    29.619   51.731  1.000 20.72
ANISOU  894  CD2  TYR  122 3308      1366     3197   -519 -1524  3 2 3
ATOM    895  CE2  TYR  122 3.140    28.773   52.574  1.000 25.40
ANISOU  895  CE2  TYR  122 3772      1812     4067   -782 -2084  8 7 3
ATOM    896  CZ   TYR  122 4.413    29.101   52.992  1.000 20.93
ANISOU  896  CZ   TYR  122 2985      1742     3224    -96 -1145  3 1 3
ATOM    897  OH   TYR  122 5.068    28.230   53.826  1.000 29.87
ANISOU  897  OH   TYR  122 4830      1998     4522   -680 -3078  6 2 1
ATOM    898  C    TYR  122 3.218    30.876   48.209  1.000 12.33
ANISOU  898  C    TYR  122 1833      1412     1439     89  -218  8 8
ATOM    899  O    TYR  122 4.395    30.507   48.117  1.000 14.25
ANISOU  899  O    TYR  122 1896      1861     1656    339  -242 2 1 6
ATOM    900  N    PHE  123 2.224    30.269   47.573  1.000 11.28
ANISOU  900  N    PHE  123 1950      1297     1041      6  -151  1 8 5
ATOM    901  CA   PHE  123 2.482    29.151   46.665  1.000 12.08
ANISOU  901  CA   PHE  123 1731      1219     1640     64   -60  2 6
ATOM    902  CB   PHE  123 1.139    28.719   46.024  1.000 13.86
ANISOU  902  CB   PHE  123 2048      1550     1666   -104  -276  - 8 2
ATOM    903  CG   PHE  123 1.311    27.516   45.099  1.000 14.44
ANISOU  903  CG   PHE  123 2173      1677     1637    142  -475  - 9 4
ATOM    904  CD1  PHE  123 1.281    26.234   45.614  1.000 13.64
ANISOU  904  CD1  PHE  123 1857      1563     1764    -42  -702  - 2 3 6
ATOM    905  CD2  PHE  123 1.511    27.664   43.729  1.000 13.81
ANISOU  905  CD2  PHE  123 1450      2164     1634   -420  -295  - 2 4 8
ATOM    906  CE1  PHE  123 1.468    25.141   44.795  1.000 17.16
ANISOU  906  CE1  PHE  123 2282      1819     2418    130  -855  - 6 4 4
ATOM    907  CE2  PHE  123 1.715    26.559   42.916  1.000 18.31
ANISOU  907  CE2  PHE  123 2098      2657     2201  -1053   172  - 8 4 5
ATOM    908  CZ   PHE  123 1.706    25.295   43.445  1.000 16.71
ANISOU  908  CZ   PHE  123 1442      2382     2526    -36  -306 - 1 0 7 7
ATOM    909  C    PHE  123 3.489    29.511   45.581  1.000 13.48
ANISOU  909  C    PHE  123 2004      1472     1645    236   157  1 8
ATOM    910  O    PHE  123 4.424    28.768   45.242  1.000 13.07
ANISOU  910  O    PHE  123 1591      1498     1876     42   -78  - 1 7 2
ATOM    911  N    ASP  124 3.294    30.684   44.948  1.000 13.83
ANISOU  911  N    ASP  124 1490      1575     2189     51   207 2 8 8
ATOM    912  CA   ASP  124 4.207    31.036   43.861  1.000 13.75
ANISOU  912  CA   ASP  124 1505      1330     2389    458   398  3 4 4
ATOM    913  CB   ASP  124 3.708    32.352   43.242  1.000 18.95
ANISOU  913  CB   ASP  124 2650      1970     2580    656   -63  9 2 6
ATOM    914  CG   ASP  124 4.470    32.708   41.989  1.000 27.54
ANISOU  914  CG   ASP  124 5327      2099     3036   -123   939  8 8 0
ATOM    915  OD1  ASP  124 4.541    31.904   41.023  1.000 37.04
ANISOU  915  OD1  ASP  124 6362      3225     4485    108  2616  - 3 3 1
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ATOM    916  OD2 ASP  124 4.985  33.843 42.011 1.000 32.60
ANISOU 916  OD2 ASP  124 4724   3509   4151  -1539 234  851
ATOM    917  C   ASP  124 5.645  31.164 44.328 1.000 14.49
ANISOU 917  C   ASP  124 1493   1721   2293   327  485  482
ATOM    918  O   ASP  124 6.591  30.721 43.674 1.000 14.52
ANISOU 918  O   ASP  124 1477   1363   2679   289  497  307
ATOM    919  N   ARG  125 5.866  31.777 45.499 1.000 14.03
ANISOU 919  N   ARG  125 1501   1271   2558   353  398  414
ATOM    920  CA  ARG  125 7.214  31.863 46.044 1.000 16.40
ANISOU 920  CA  ARG  125 1642   1625   2963   194  178  226
ATOM    921  C   ARG  125 7.828  30.494 46.346 1.000 14.69
ANISOU 921  C   ARG  125 1396   1688   2496   232  -25  153
ATOM    922  O   ARG  125 8.999  30.245 46.034 1.000 14.10
ANISOU 922  O   ARG  125 1279   1656   2424    7  -205 -201
ATOM    923  CB  ARG  125 7.213  32.705 47.318 1.000 18.13
ANISOU 923  CB  ARG  125 1950   1902   3035   787  -81   46
ATOM    924  CG  ARG  125 7.045  34.193 47.041 1.000 23.51
ANISOU 924  CG  ARG  125 2232   1780   4919   883  -36  -225
ATOM    925  CD  ARG  125 8.391  34.815 46.694 1.000 29.33
ANISOU 925  CD  ARG  125 3596   2824   4724  -667  237  -187
ATOM    926  NE  ARG  125 8.194  36.262 46.803 1.000 32.99
ANISOU 926  NE  ARG  125 4350   2766   5418  -678 -1642 156
ATOM    927  CZ  ARG  125 8.868  37.153 47.495 1.000 27.38
ANISOU 927  CZ  ARG  125 2292   2758   5353  -276  -580 -246
ATOM    928  NH1 ARG  125 9.916  36.821 48.235 1.000 38.55
ANISOU 928  NH1 ARG  125 4611   3604   6433   449 -2476 -669
ATOM    929  NH2 ARG  125 8.491  38.423 47.442 1.000 30.26
ANISOU 929  NH2 ARG  125 4062   2570   4865  -369  -835 363
ATOM    930  N   GLN  126 7.065  29.573 46.920 1.000 12.36
ANISOU 930  N   GLN  126 1316   1376   2002   248  -63  -264
ATOM    931  CA  GLN  126 7.524  28.201 47.153 1.000 13.39
ANISOU 931  CA  GLN  126 1765   1323   1999   219  -355 -377
ATOM    932  CB  AGLN 126 6.363  27.455 47.828 0.500 16.24
ANISOU 932  CB  AGLN 126 2422   1391   2357   188  202  -192
ATOM    933  CG  AGLN 126 6.149  27.758 49.284 0.500 18.83
ANISOU 933  CG  AGLN 126 2761   2021   2371   68  233  -210
ATOM    934  CD  AGLN 126 7.077  27.146 50.298 0.500 23.94
ANISOU 934  CD  AGLN 126 3578   2745   2774  -604  -757  3 3
ATOM    935  OE1 AGLN 126 7.181  27.683 51.419 0.500 35.94
ANISOU 935  OE1 AGLN 126 6788   3731   3136  -578 -1567 -478
ATOM    936  NE2 AGLN 126 7.774  26.055 50.008 0.500 24.63
ANISOU 936  NE2 AGLN 126 4491   1118   3751  -881 -2407 462
ATOM    937  CB  BGLN 126 6.525  27.417 48.018 0.500 13.36
ANISOU 937  CB  BGLN 126 1695   1137   2245   602  -114 -255
ATOM    938  CG  BGLN 126 6.604  27.750 49.497 0.500 18.28
ANISOU 938  CG  BGLN 126 2537   2257   2153   -68  -176 -105
ATOM    939  CD  BGLN 126 5.442  27.237 50.319 0.500 18.42
ANISOU 939  CD  BGLN 126 2227   2573   2198   344  -159 106
ATOM    940  OE1 BGLN 126 5.605  26.442 51.242 0.500 25.36
ANISOU 940  OE1 BGLN 126 3289   3517   2828  -100  -223 953
ATOM    941  NE2 BGLN 126 4.231  27.685 50.003 0.500 25.02
ANISOU 941  NE2 BGLN 126 2427   2669   4413  1004  -83  -298
ATOM    942  C   GLN  126 7.860  27.448 45.861 1.000 12.95
ANISOU 942  C   GLN  126 1506   1434   1979   307  -372 -366
ATOM    943  O   GLN  126 8.859  26.721 45.748 1.000 11.66
ANISOU 943  O   GLN  126 1461   1142   1827   182  -85  159
ATOM    944  N   TYR  127 6.960  27.578 44.868 1.000 11.61
ANISOU 944  N   TYR  127 1400   1276   1735   146  -168 -10
ATOM    945  CA  TYR  127 7.152  26.869 43.585 1.000 11.21
ANISOU 945  CA  TYR  127 1469   1242   1550   -92  -40  192
ATOM    946  CB  TYR  127 5.901  26.940 42.724 1.000 11.82
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ANISOU  946  CB   TYR  127 1346      1655    1491      -13    82  4  7
ATOM    947  CG   TYR  127 5.791    26.069  41.496   1.000 11.49
ANISOU  947  CG   TYR  127 1278      1428    1660       -4  -4  1  0
ATOM    948  CD1  TYR  127 6.550    24.928  41.270   1.000 11.28
ANISOU  948  CD1  TYR  127 1030      1334    1921      -87 -100  3  3
ATOM    949  CE1  TYR  127 6.406    24.153  40.115   1.000 11.47
ANISOU  949  CE1  TYR  127 1164      1167    2027      -51  -53  2  1
ATOM    950  CD2  TYR  127 4.871    26.410  40.500   1.000 11.98
ANISOU  950  CD2  TYR  127 1677      1093    1784      204 -219 -1 0 0
ATOM    951  CE2  TYR  127 4.715    25.655  39.357   1.000 11.37
ANISOU  951  CE2  TYR  127 1539      1118    1665      140  -68  - 7 3
ATOM    952  CZ   TYR  127 5.494    24.508  39.163   1.000 11.02
ANISOU  952  CZ   TYR  127 1202      1226    1760       91 48 -125
ATOM    953  OH   TYR  127 5.379    23.720  38.030   1.000 11.57
ANISOU  953  OH   TYR  127 1547      1138    1712       94 177  - 34
ATOM    954  C    TYR  127 8.386    27.392  42.882   1.000 10.83
ANISOU  954  C    TYR  127 1296       989    1830      230  -43 378
ATOM    955  O    TYR  127 9.185    26.605  42.375   1.000 10.86
ANISOU  955  O    TYR  127 1292      1232    1603      164 -237  - 42
ATOM    956  N    THR  128 8.565    28.716  42.865   1.000 10.98
ANISOU  956  N    THR  128 1554       976    1642      212   -9 5 57
ATOM    957  CA   THR  128 9.766    29.305  42.295   1.000 11.80
ANISOU  957  CA   THR  128 1686      1125    1673      -47 -169 3 86
ATOM    958  CB   THR  128 9.605    30.849  42.378   1.000 12.66
ANISOU  958  CB   THR  128 1873      1074    1864      -52 -233 5 21
ATOM    959  OG1  THR  128 8.530    31.286  41.517   1.000 16.74
ANISOU  959  OG1  THR  128 2223      1597    2542      124 -457 9 98
ATOM    960  CG2  THR  128 10.878   31.510  41.893   1.000 16.54
ANISOU  960  CG2  THR  128 1871      778     3635      262  655 1 38
ATOM    961  C    THR  128 11.040   28.828  42.964   1.000 11.26
ANISOU  961  C    THR  128 1562      980     1738      -71 -162  1 48
ATOM    962  O    THR  128 11.995   28.458  42.258   1.000 12.16
ANISOU  962  O    THR  128 1769     1092     1758      17 26 279
ATOM    963  N    ALA  129 11.083   28.802  44.300   1.000 10.39
ANISOU  963  N    ALA  129 1183     1001     1763      70 -118  1 47
ATOM    964  CA   ALA  129 12.273   28.386  45.037   1.000 10.59
ANISOU  964  CA   ALA  129 1206      945     1873      -69 -170  2 81
ATOM    965  CB   ALA  129 12.113   28.603  46.536   1.000 12.46
ANISOU  965  CB   ALA  129 2113      851     1769       82 -218  5 77
ATOM    966  C    ALA  129 12.575   26.906  44.802   1.000 11.35
ANISOU  966  C    ALA  129 1258      883     2170      -16 -141  4 10
ATOM    967  O    ALA  129 13.738   26.485  44.641   1.000 10.93
ANISOU  967  O    ALA  129 1202     1157     1796      -36 -213 1 21
ATOM    968  N    SER  130 11.519   26.086  44.750   1.000 12.27
ANISOU  968  N    SER  130 1280      984     2398      -65   -1  - 24
ATOM    969  CA   SER  130 11.682   24.650  44.512   1.000 10.89
ANISOU  969  CA   SER  130 1623      876     1638      -85   44 370
ATOM    970  CB  ASER  130 10.342   23.940  44.716   0.500 10.08
ANISOU  970  CB  ASER  130 1432      603     1793      213  247 413
ATOM    971  OG  ASER  130 9.771    24.063  46.006   0.500  9.12
ANISOU  971  OG  ASER  130 1021      651     1792       91  1 -143
ATOM    972  CB  BSER  130 10.364   23.919  44.765   0.500 10.60
ANISOU  972  CB  BSER  130 1687      822     1521      -45  318 1 58
ATOM    973  OG  BSER  130 9.418    24.098  43.734   0.500 16.22
ANISOU  973  OG  BSER  130 1717     1289     3156      137 -525 3 48
ATOM    974  C    SER  130 12.214   24.373  43.110   1.000 10.53
ANISOU  974  C    SER  130 1586      733     1684     -166  210 4 84
ATOM    975  O    SER  130 13.137   23.532  42.942   1.000 11.17
ANISOU  975  O    SER  130 1385     1012     1849     -151  -95 1 40
ATOM    976  N    ARG  131 11.680   25.044  42.079   1.000 10.46
ANISOU  976  N    ARG  131 1578      861     1534      -87  -66 9  9
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ATOM    977  CA  ARG  131 12.260  24.839  40.742  1.000 10.60
ANISOU  977  CA  ARG  131 1480    1110    1438    61 -288    8  2
ATOM    978  CB  ARG  131 11.426  25.553  39.679  1.000 12.99
ANISOU  978  CB  ARG  131 1893    1369    1673    63 -525  27  6
ATOM    979  CG  ARG  131 10.003  25.065  39.431  1.000 13.64
ANISOU  979  CG  ARG  131 1707    1735    1742   335  -559 - 8  6
ATOM    980  CD  ARG  131 9.349   25.669  38.206  1.000 17.71
ANISOU  980  CD  ARG  131 2078    1973    2677    81 -983  70  1
ATOM    981  NE  ARG  131 9.453   27.113  38.015  1.000 19.76
ANISOU  981  NE  ARG  131 2716    2034    2757   -25  -525 71  3
ATOM    982  CZ  ARG  131 8.629   28.004  38.568  1.000 21.24
ANISOU  982  CZ  ARG  131 3688    1878    2503   -8  -128   6 47
ATOM    983  NH1 ARG  131 7.631   27.634  39.366  1.000 21.32
ANISOU  983  NH1 ARG  131 2792    3142    2166  -486  -667 5  7
ATOM    984  NH2 ARG  131 8.771   29.310  38.361  1.000 27.83
ANISOU  984  NH2 ARG  131 4649    1822    4103   -90  -422 561
ATOM    985  C   ARG  131 13.714  25.323  40.688  1.0'.0 10.42
ANISOU  985  C   ARG  131 1542    1078    1339    50 -103   1
ATOM    986  O   ARG  131 14.568  24.683  40.080  1.000 10.94
ANISOU  986  O   ARG  131 1544    1105    1506   177  -134 4  2
ATOM    987  N   ALA  132 14.028  26.438  41.343  1.000 10.97
ANISOU  987  N   ALA  132 1477    1129    1563    74 -364  - 4 5
ATOM    988  CA  ALA  132 15.379  26.983  41.343  1.000 11.10
ANISOU  988  CA  ALA  132 1539    944   1735      9  -102  9 7
ATOM    989  CB  ALA  132 15.429  28.344  42.048  1.000 12.82
ANISOU  989  CB  ALA  132 1711    1171    1987   -48  -248 -19 8
ATOM    990  C   ALA  132 16.393  26.045  41.995  1.000 11.55
ANISOU  990  C   ALA  132 1085    1107    2197  -197   305  7 4 5
ATOM    991  O   ALA  132 17.481  25.832  41.432  1.000 11.81
ANISOU  991  O   ALA  132 1081    1809    1599  -204    17 - 9
ATOM    992  N   VAL  133 16.061  25.490  43.175  1.000 11.16
ANISOU  992  N   VAL  133 1260    1356    1623  -148    51 350
ATOM    993  CA  VAL  133 17.011  24.587  43.840  1.000 11.62
ANISOU  993  CA  VAL  133 1505    1529    1380   -69  -297 8  9
ATOM    994  CB  VAL  133 16.738  24.418  45.344  1.000 12.14
ANISOU  994  CB  VAL  133 1376    1674    1564   -74   -25  3 6 4
ATOM    995  CG1 VAL  133 15.550  23.501  45.608  1.000 14.96
ANISOU  995  CG1 VAL  133 1705    2316    1662  -706     8 - 357
ATOM    996  CG2 VAL  133 17.981  23.864  46.033  1.000 15.63
ANISOU  996  CG2 VAL  133 1755    2340    1845  -341  -677 551
ATOM    997  C   VAL  133 17.079  23.268  43.065  1.000 11.71
ANISOU  997  C   VAL  133 1376    1363    1711   -24  -425 169
ATOM    998  O   VAL  133 18.198  22.733  42.925  1.000 11.55
ANISOU  998  O   VAL  133 1391    1453    1545   -4  -116  398
ATOM    999  N   ALA  134 15.982  22.758  42.480  1.000 12.87
ANISOU  999  N   ALA  134 1399    1517    1973    28 -334  - 228
ATOM   1000  CA  ALA  134 16.084  21.557  41.621  1.000 10.57
ANISOU 1000  CA  ALA  134 1106    1220    1691   153  -298 9  6
ATOM   1001  CB  ALA  134 14.699  21.096  41.186  1.000 12.20
ANISOU 1001  CB  ALA  134 1254    1589    1794    35 -303  - 127
ATOM   1002  C   ALA  134 16.968  21.797  40.399  1.000 12.58
ANISOU 1002  C   ALA  134 1393    1399    1987   272   -4 2 7 7
ATOM   1003  O   ALA  134 17.712  20.924  39.970  1.000 11.01
ANISOU 1003  O   ALA  134 1254    1358    1574    83 -268  2 6
ATOM   1004  N   ARG  135 16.908  22.995  39.809  1.000 12.03
ANISOU 1004  N   ARG  135 1517    1230    1824   -62  -327 8  7
ATOM   1005  CA  ARG  135 17.773  23.353  38.676  1.000 13.23
ANISOU 1005  CA  ARG  135 1854    1158    2015  -270  -209 161
ATOM   1006  CB  ARG  135 17.393  24.734  38.170  1.000 14.57
ANISOU 1006  CB  ARG  135 2203    1339    1994   -45  -541 222
ATOM   1007  CG  ARG  135 17.753  25.160  36.797  1.000 19.22
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ANISOU 1007 CG  ARG 135 4204    1120    1980    -490 -433 150
ATOM   1008 CD  ARG 135 17.237  26.563  36.471  1.000 22.14
ANISOU 1008 CD  ARG 135 4046    1500    2868    -159  315 8 2 2
ATOM   1009 NE  ARG 135 15.831  26.607  36.077  1.000 22.66
ANISOU 1009 NE  ARG 135 4239    1404    2965    -94   47 2 5 7
ATOM   1010 CZ  ARG 135 14.802  27.184  36.684  1.000 21.69
ANISOU 1010 CZ  ARG 135 4004    1906    2333    92 -506  6 4
ATOM   1011 NH1 ARG 135 14.917  27.843  37.833  1.000 22.26
ANISOU 1011 NH1 ARG 135 4114    2532    1812    460  -833 3 4 1
ATOM   1012 NH2 ARG 135 13.582  27.113  36.149  1.000 22.31
ANISOU 1012 NH2 ARG 135 4000    2243    2234    -544 -419 8
ATOM   1013 C   ARG 135 19.251  23.275  39.057  1.000 12.70
ANISOU 1013 C   ARG 135 1742    1264    1821    -119  -16 4 3 0
ATOM   1014 O   ARG 135 20.069  22.818  38.238  1.000 14.67
ANISOU 1014 O   ARG 135 2133    1529    1910    19 169 3 9 1
ATOM   1015 N   GLU 136 19.572  23.712  40.266  1.000 12.15
ANISOU 1015 N   GLU 136 1423    1372    1820    -36   70 4 3 0
ATOM   1016 CA  GLU 136 20.960  23.630  40.763  1.000 14.52
ANISOU 1016 CA  GLU 136 1622    1701    2194    -90  -197 3 7 1
ATOM   1017 CB  GLU 136 21.212  24.513  41.981  1.000 15.59
ANISOU 1017 CB  GLU 136 1502    1781    2642    14 -231  1 1
ATOM   1018 CG  GLU 136 21.064  26.020  41.783  1.000 18.01
ANISOU 1018 CG  GLU 136 2010    1762    3071    -232 -153 1 2 6
ATOM   1019 CD  GLU 136 21.798  26.484  40.537  1.000 20.18
ANISOU 1019 CD  GLU 136 2071    2079    3519    -308  89 3 6 9
ATOM   1020 OE1 GLU 136 22.987  26.148  40.394  1.000 24.64
ANISOU 1020 OE1 GLU 136 2060    2937    4364    -262  338  6 1 5
ATOM   1021 OE2 GLU 136 21.195  27.150  39.670  1.000 24.19
ANISOU 1021 OE2 GLU 136 2479    2327    4385    -381  317  1 4 2 6
ATOM   1022 C   GLU 136 21.364  22.186  41.076  1.000 14.00
ANISOU 1022 C   GLU 136 1338    1619    2361    -112 -442 2 2 3
ATOM   1023 O   GLU 136 22.508  21.781  40.833  1.000 13.86
ANISOU 1023 O   GLU 136 1366    1890    2009    -100 -287 3 2 9
ATOM   1024 N   VAL 137 20.472  21.338  41.580  1.000 11.78
ANISOU 1024 N   VAL 137 1309    1451    1715    148  -223 8 5
ATOM   1025 CA  VAL 137 20.753  19.896  41.771  1.000 12.49
ANISOU 1025 CA  VAL 137 1369    1522    1853    240  -69  2 8 9
ATOM   1026 CB  VAL 137 19.560  19.165  42.429  1.000 12.41
ANISOU 1026 CB  VAL 137 1422    1424    1869    -67  -85  - 2 0 4
ATOM   1027 CG1 VAL 137 19.728  17.634  42.401  1.000 12.55
ANISOU 1027 CG1 VAL 137 1371    1508    1892    182  185  1 1 1
ATOM   1028 CG2 VAL 137 19.355  19.607  43.852  1.000 11.35
ANISOU 1028 CG2 VAL 137 1461    1281    1572    182  -254 2 8 8
ATOM   1029 C   VAL 137 21.100  19.241  40.435  1.000 12.48
ANISOU 1029 C   VAL 137 1202    1428    2113    150  -16  8 5
ATOM   1030 O   VAL 137 22.057  18.462  40.287  1.000 13.03
ANISOU 1030 O   VAL 137 1021    1683    2249    149   1  1 4 6
ATOM   1031 N   LEU 138 20.309  19.562  39.401  1.000 10.28
ANISOU 1031 N   LEU 138 1198    881  1829    -15   158 2 2 6
ATOM   1032 CA  LEU 138 20.571  19.029  38.066  1.000 12.48
ANISOU 1032 CA  LEU 138 1312    1408    2024    110  273  - 5 2
ATOM   1033 CB  LEU 138 19.398  19.358  37.130  1.000 11.81
ANISOU 1033 CB  LEU 138 1260    1586    1642    -20  383 .4 3
ATOM   1034 CG  LEU 138 18.036  18.726  37.457  1.000 10.77
ANISOU 1034 CG  LEU 138 1391    1397    1304    -83  219 2 1 3
ATOM   1035 CD1 LEU 138 16.916  19.324  36.596  1.000 12.72
ANISOU 1035 CD1 LEU 138 1416    1587    1829    -59  -25  1 7 3
ATOM   1036 CD2 LEU 138 18.052  17.207  37.320  1.000 14.32
ANISOU 1036 CD2 LEU 138 1986    1390    2065    -79  296 3 7 0
ATOM   1037 C   LEU 138 21.903  19.525  37.505  1.000 13.61
ANISOU 1037 C   LEU 138 1305    2026    1840    -65  174 5
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ATOM    1038 O    LEU  138 22.695  18.760  36.920 1.000 14.97
ANISOU  1038 O    LEU  138 1125    2247    2313    105   234  178
ATOM    1039 N    ARG  139 22.184  20.816  37.614 1.000 13.26
ANISOU  1039 N    ARG  139 1432    2046    1561   -155   219  317
ATOM    1040 CA   ARG  139 23.397  21.372  37.085 1.000 14.71
ANISOU  1040 CA   ARG  139 1648    1941    2000    -27   502  447
ATOM    1041 C    ARG  139 24.636  20.815  37.775 1.000 15.16
ANISOU  1041 C    ARG  139 1425    2101    2235   -158   324  116
ATOM    1042 O    ARG  139 25.650  20.495  37.166 1.000 18.15
ANISOU  1042 O    ARG  139 1628    2581    2688     18   612  339
ATOM    1043 CB   ARG  139 23.394  22.926  37.206 1.000 19.67
ANISOU  1043 CB   ARG  139 1749    1923    3803   -196   186  252
ATOM    1044 CG   ARG  139 24.418  23.487  36.237 1.000 28.66
ANISOU  1044 CG   ARG  139 3924    2584    4383  -2305   882 -563
ATOM    1045 CD   ARG  139 24.245  24.997  36.111 1.000 39.58
ANISOU  1045 CD   ARG  139 6801    2389    5849  -3273   119 -306
ATOM    1046 NE   ARG  139 24 910   25.660  37.210 1.000 47.91
ANISOU  1046 NE   ARG  139 9548    2435    6222  -2157 -1331 -708
ATOM    1047 CZ   ARG  139 24.493  26.682  37.928 1.000 45.42
ANISOU  1047 CZ   ARG  139 6941    4516    5802   -882 -2118 -1238
ATOM    1048 NH1  ARG  139 23.316  27.273  37.722 1.000 64.33
ANISOU  1048 NH1  ARG  139 7248    8153    9039     93 -2965 -980
ATOM    1049 NH2  ARG  139 25.309  27.109  38.888 1.000 32.62
ANISOU  1049 NH2  ARG  139 5020    4758    2616  -2746   590  167
ATOM    1050 N    ALA  140 24.562  20.684  39.096 1.000 14.85
ANISOU  1050 N    ALA  140 1287    2204    2151   -517   -26  -46
ATOM    1051 CA   ALA  140 25.730  20.257  39.856 1.000 15.80
ANISOU  1051 CA   ALA  140 989 2649        2366   -309    -9 -401
ATOM    1052 CB   ALA  140 25.444  20.442  41.330 1.000 19.36
ANISOU  1052 CB   ALA  140 2685    2447    2222    243  -435 -480
ATOM    1053 C    ALA  140 26.111  18.806  39.584 1.000 16.86
ANISOU  1053 C    ALA  140 1555    2795    2054     12  -186 -458
ATOM    1054 O    ALA  140 27.258  18.403  39.796 1.000 18.90
ANISOU  1054 O    ALA  140 1538    2686    2958    -21    60  145
ATOM    1055 N    THR  141 25.147  18.025  39.098 1.000 17.53
ANISOU  1055 N    THR  141 1779    2532    2350   -528   218 -108
ATOM    1056 CA   THR  141 25.340  16.625  38.765 1.000 15.59
ANISOU  1056 CA   THR  141 1256    2401    2268   -192   -95  291
ATOM    1057 CB   THR  141 24.207  15.735  39.343 1.000 14.77
ANISOU  1057 CB   THR  141 1238    2200    2172    155   282  301
ATOM    1058 OG1  THR  141 22.946  16.168  38.849 1.000 12.47
ANISOU  1058 OG1  THR  141 1249    1565    1926    -31   295  476
ATOM    1059 CG2  THR  141 24.167  15.818  40.859 1.000 14.82
ANISOU  1059 CG2  THR  141 1394    2077    2160    135   -47  177
ATOM    1060 C    THR  141 25.423  16.374  37.257 1.000 16.11
ANISOU  1060 C    THR  141 1732    2046    2343    303   583  325
ATOM    1061 O    THR  141 25.432  15.235  36.778 1.000 17.55
ANISOU  1061 O    THR  141 1991    2104    2573    237   555  249
ATOM    1062 N    GLY  142 25.474  17.416  36.446 1.000 17.74
ANISOU  1062 N    GLY  142 2127    2197    2416    303   260  501
ATOM    1063 CA   GLY  142 25.611  17.263  34.987 1.000 17.32
ANISOU  1063 CA   GLY  142 1642    2494    2447   -160   453  517
ATOM    1064 C    GLY  142 24.426  16.556  34.358 1.000 16.37
ANISOU  1064 C    GLY  142 1619    1893    2710    261   472   42
ATOM    1065 O    GLY  142 24.654  15.824  33.379 1.000 18.43
ANISOU  1065 O    GLY  142 2243    2558    2201     57   798  163
ATOM    1066 N    THR  143 23.232  16.738  34.907 1.000 13.99
ANISOU  1066 N    THR  143 1531    1429    2356     83   430  350
ATOM    1067 CA   THR  143 22.049  16.003  34.472 1.000 14.69
ANISOU  1067 CA   THR  143 1768    1591    2223      8   342   93
ATOM    1068 CB   THR  143 21.208  15.584  35.700 1.000 15.52
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ANISOU 1068 CB  THR  143 1457     1653    2785    55 419 5 2 9
ATOM   1069 OG1 THR  143 22.037   14.784  36.573  1.000 14.63
ANISOU 1069 OG1 THR  143 1296     1792    2471    52 434 3 6 9
ATOM   1070 CG2 THR  143 20.044   14.738  35.231  1.000 14.24
ANISOU 1070 CG2 THR  143 1761     1981    1669    3  379 1 9 2
ATOM   1071 C   THR  143 21.135   16.785  33.532  1.000 13.96
ANISOU 1071 C   THR  143 1553     1708    2044    128  479  - 1 3 1
ATOM   1072 O   THR  143 20.642   17.828  33.923  1.000 15.65
ANISOU 1072 O   THR  143 2374     1580    1995    315  486  5 5
ATOM   1073 N   GLU  144 20.928   16.279  32.322  1.000 15.32
ANISOU 1073 N   GLU  144 1734     1904    2184    -156 260  - 2 7 1
ATOM   1074 CA  GLU  144 19.917   16.693  31.362  1.000 17.30
ANISOU 1074 CA  GLU  144 1686     2470    2417    -377 152  1 0 6
ATOM   1075 C   GLU  144 18.774   15.693  31.292  1.000 16.84
ANISOU 1075 C   GLU  144 1633     2380    2386    -298 313  - 2 4 2
ATOM   1076 O   GLU  144 18.922   14.631  30.680  1.000 16.71
ANISOU 1076 O   GLU  144 1470     2057    2821    -43  610  5 8
ATOM   1077 CB  GLU  144 20.539   16.856  29.970  1.000 21.91
ANISOU 1077 CB  GLU  144 2747     3417    2162    -1508 31 - 8
ATOM   1078 CG  GLU  144 19.568   17.063  28.825  1.000 37.93
ANISOU 1078 CG  GLU  144 6652     4374    3385    -2057 -2082 1 7 6 7
ATOM   1079 CD  GLU  144 19.293   18.507  28.466  1.000 43.55
ANISOU 1079 CD  GLU  144 7869     4258    4419    -2497 -2259 2 1 2 9
ATOM   1080 OE1 GLU  144 19.602   19.365  29.326  1.000 51.81
ANISOU 1080 OE1 GLU  144 9843     4613    5230    -3180 -832 1 1 2 6
ATOM   1081 OE2 GLU  144 18.766   18.798  27.367  1.000 40.12
ANISOU 1081 OE2 GLU  144 5551     6029    3662    -285  -115 2 6 6 0
ATOM   1082 N   PRO  145 17.620   15.959  31.908  1.000 14.29
ANISOU 1082 N   PRO  145 1634     1364    2432    -4 208 2 6 5
ATOM   1083 CD  PRO  145 17.256   17.136  32.718  1.000 14.14
ANISOU 1083 CD  PRO  145 1735     1778    1859    -55  32 1 6 7
ATOM   1084 CA  PRO  145 16.507   15.000  31.807  1.000 13.72
ANISOU 1084 CA  PRO  145 1484     1391    2337    66 173 4 6 6
ATOM   1085 CB  PRO  145 15.406   15.701  32.606  1.000 14.20
ANISOU 1085 CB  PRO  145 1459     1636    2302    161  -41 2 8 9
ATOM   1086 CG  PRO  145 16.132   16.608  33.561  1.000 14.43
ANISOU 1086 CG  PRO  145 1796     2007    1679    -23  -42 4 4 9
ATOM   1087 C   PRO  145 16.076   14.794  30.372  1.000 15.18
ANISOU 1087 C   PRO  145 1745     1665    2359    -192 231 2 8 7
ATOM   1088 O   PRO  145 16.178   15.685  29.509  1.000 15.40
ANISOU 1088 O   PRO  145 2430     1511    1910    -85  613  - 1 5
ATOM   1089 N   ASP  146 15.544   13.613  30.070  1.000 15.79
ANISOU 1089 N   ASP  146 2019     1611    2367    -191 666  8 1
ATOM   1090 CA  ASP  146 14.918   13.366  28.773  1.000 16.74
ANISOU 1090 CA  ASP  146 2095     1759    2506    -348 575  - 7 7
ATOM   1091 CB  ASP  146 14.300   11.966  28.727  1.000 18.99
ANISOU 1091 CB  ASP  146 2508     1729    2977    -323 780  - 4 3 9
ATOM   1092 CG  ASP  146 13.504   11.784  27.444  1.000 27.04
ANISOU 1092 CG  ASP  146 4012     2450    3813    -720 -229 - 8 0 5
ATOM   1093 OD1 ASP  146 12.295   12.121  27.409  1.000 38.65
ANISOU 1093 OD1 ASP  146 3943     4889    5852    -595 -1282 - 3 2 3
ATOM   1094 OD2 ASP  146 14.091   11.311  26.466  1.000 39.95
ANISOU 1094 OD2 ASP  146 6913     5052    3214    16 0  -1182
ATOM   1095 C   ASP  146 13.860   14.441  28.552  1.000 16.65
ANISOU 1095 C   ASP  146 2461     1904    1961    -128 580  - 4 0
ATOM   1096 O   ASP  146 13.041   14.605  29.457  1.000 15.67
ANISOU 1096 O   ASP  146 2110     1935    1908    -334 381  - 4 2 0
ATOM   1097 N   GLY  147 13.871   15.149  27.429  1.000 20.60
ANISOU 1097 N   GLY  147 3484     2416    1927    -26  419 1 2 9
ATOM   1098 CA  GLY  147 12.903   16.212  27.155  1.000 18.06
ANISOU 1098 CA  GLY  147 2771     2451    1638    -382 98 9 3
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ATOM    1099 C   GLY 147 13.361  17.574 27.609 1.000 18.73
ANISOU  1099 C   GLY 147 2836    2195   2085   -524 143  5 2 7
ATOM    1100 O   GLY 147 12.676  18.570 27.282 1.000 18.34
ANISOU  1100 O   GLY 147 2865    2416   1687   -413 -72  3 8 9
ATOM    1101 N   GLY 148 14.498  17.634 28.316 1.000 16.35
ANISOU  1101 N   GLY 148 2936    1506   1772   -157 142  8 8
ATOM    1102 CA  GLY 148 15.116  18.889 28.747 1.000 15.34
ANISOU  1102 CA  GLY 148 2723    1279   1829   55 450 - 26
ATOM    1103 C   GLY 148 14.768  19.339 30.144 1.000 12.97
ANISOU  1103 C   GLY 148 2231    1416   1280   -93  -62  4 0 7
ATOM    1104 O   GLY 148 13.769  18.930 30.771 1.000 13.79
ANISOU  1104 O   GLY 148 2301    1376   1561   -164 88 3 2 3
ATOM    1105 N   VAL 149 15.604  20.224 30.718 1.000 12.81
ANISOU  1105 N   VAL 149 1815    1366   1686   155 -31  2 3 8
ATOM    1106 CA  VAL 149 15.388  20.724 32.079 1.000 11.81
ANISOU  1106 CA  VAL 149 1333    1390   1765   54 -92 129
ATOM    1107 CB  VAL 149 16.594  21.636 32.480 1.000 11.97
ANISOU  1107 CB  VAL 149 1136    1696   1717   -100 246  1 2 4
ATOM    1108 CG1 VAL 149 16.358  22.336 33.802 1.000 15.26
ANISOU  1108 CG1 VAL 149 1941    1922   1936   -195 55 -2 2 3
ATOM    1109 CG2 VAL 149 17.868  20.794 32.538 1.000 17.21
ANISOU  1109 CG2 VAL 149 1231    2045   3265   45 102 -1 0 3
ATOM    1110 C   VAL 149 14.101  21.482 32.280 1.000 11.32
ANISOU  1110 C   VAL 149 1186    1303   1813   -78  131  4 7 9
ATOM    1111 O   VAL 149 13.378  21.218 33.253 1.000 12.35
ANISOU  1111 O   VAL 149 1664    1423   1608   -71  229  1 6 7
ATOM    1112 N   GLU 150 13.752  22.463 31.460 1.000 11.96
ANISOU  1112 N   GLU 150 1347    1453   1746   29 -36 420
ATOM    1113 CA  GLU 150 12.592  23.286 31.815 1.000 10.90
ANISOU  1113 CA  GLU 150 1623    1359   1159   118  0  4 0 5
ATOM    1114 CB  GLU 150 12.608  24.601 30.999 1.000 17.60
ANISOU  1114 CB  GLU 150 2530    1470   2687   181  -161 9 0 7
ATOM    1115 CG  GLU 150 13.811  25.488 31.314 1.000 17.86
ANISOU  1115 CG  GLU 150 2744    797 3246    246  434 2 0 2
ATOM    1116 CD  GLU 150 13.956  25.929 32.738 1.000 19.47
ANISOU  1116 CD  GLU 150 3018    1353   3027   -97  -84  6 6 2
ATOM    1117 OE1 GLU 150 12.951  26.005 33.475 1.000 18.21
ANISOU  1117 OE1 GLU 150 3035    1512   2373   -178 -321 5 3 6
ATOM    1118 OE2 GLU 150 15.109  26.237 33.122 1.000 22.59
ANISOU  1118 OE2 GLU 150 2993    1664   3927   -38  -150 2 8 4
ATOM    1119 C   GLU 150 11.277  22.533 31.705 1.000 12.22
ANISOU  1119 C   GLU 150 1429    1540   1676   235  147  - 5
ATOM    1120 O   GLU 150 10.341  22.757 32.530 1.000 13.44
ANISOU  1120 O   GLU 150 1739    1474   1894   315  470 2 8 8
ATOM    1121 N   ALA 151 11.118  21.625 30.742 1.000 11.88
ANISOU  1121 N   ALA 151 1783    1255   1477   94 45 2 5 3
ATOM    1122 CA  ALA 151 9.881   20.844 30.698 1.000 13.82
ANISOU  1122 CA  ALA 151 1744    2054   1454   -100 -413 3 9 6
ATOM    1123 CB  ALA 151 9.739   20.094 29.390 1.000 14.89
ANISOU  1123 CB  ALA 151 1489    2318   1851   22 -269  - 3 5
ATOM    1124 C   ALA 151 9.792   19.864 31.867 1.000 12.71
ANISOU  1124 C   ALA 151 1448    1463   1920   93 41 4 2 4
ATOM    1125 O   ALA 151 8.655   19.580 32.280 1.000 14.69
ANISOU  1125 O   ALA 151 1535    2114   1932   -242 204  -1 0 8
ATOM    1126 N   PHE 152 10.925  19.401 32.410 1.000 11.73
ANISOU  1126 N   PHE 152 1598    1259   1598   120  9  2 7 1
ATOM    1127 CA  PHE 152 10.890  18.554 33.602 1.000 10.61
ANISOU  1127 CA  PHE 152 1444    1061   1526   -33  34 1 6 0
ATOM    1128 CB  PHE 152 12.293  17.981 33.820 1.000 10.23
ANISOU  1128 CB  PHE 152 1317    1132   1437   -144 207  4 1 0
ATOM    1129 CG  PHE 152 12.517  17.187 35.095 1.000 10.36
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ANISOU 1129 CG   PHE  152 1388      1149      1399      -34   147   2 7 6
ATOM   1130 CD1  PHE  152 12.036  15.896  35.229  1.000 11.24
ANISOU 1130 CD1  PHE  152 1479      1047      1743      114  -103 5 6 6
ATOM   1131 CD2  PHE  152 13.229  17.701  36.154  1.000 11.21
ANISOU 1131 CD2  PHE  152 1489      1449      1319       85 174 1 5 1
ATOM   1132 CE1  PHE  152 12.252  15.163  36.380  1.000 10.80
ANISOU 1132 CE1  PHE  152 1400      1234      1467      249  -111 3 7 3
ATOM   1133 CE2  PHE  152 13.431  16.992  37.341  1.000 11.82
ANISOU 1133 CE2  PHE  152 1709      1622      1160     -276  414   2 5 0
ATOM   1134 CZ   PHE  152 12.932  15.717  37.457  1.000 11.97
ANISOU 1134 CZ   PHE  152 1651      1604      1293     -255  296   1 7 0
ATOM   1135 C    PHE  152 10.430  19.292  34.858  1.000 12.24
ANISOU 1135 C    PHE  152 1754      1168      1730      -10  339   8 4
ATOM   1136 O    PHE  152 9.728   18.729  35.726  1.000 11.49
ANISOU 1136 O    PHE  152 1672      1142      1550      200  109   2 7 7
ATOM   1137 N    LEU  153 10.809  20.575  34.997  1.000 11.86
ANISOU 1137 N    LEU  153 2030      1236      1240       -6 73  1 5 6
ATOM   1138 CA   LEU  153 10.532  21.386  36.155  1.000 11.99
ANISOU 1138 CA   LEU  153 1890      1229      1437     -165  307  8 5
ATOM   1139 CB   LEU  153 11.654  22.420  36.353  1.000 12.81
ANISOU 1139 CB   LEU  153 1691      1381      1794      -72   97  - 4 0
ATOM   1140 CG   LEU  153 13.059  21.910  36.592  1.000 12.87
ANISOU 1140 CG   LEU  153 1762      1645      1483      146  269   6 4
ATOM   1141 CD1  LEU  153 14.027  23.081  36.611  1.000 15.99
ANISOU 1141 CD1  LEU  153 1609      2006      2462      -49   450   - 4 3 1
ATOM   1142 CD2  LEU  153 13.185  21.158  37.914  1.000 19.37
ANISOU 1142 CD2  LEU  153 3091      2462      1806      809  275   5 4 0
ATOM   1143 C    LEU  153 9.179   22.084  36.123  1.000 12.96
ANISOU 1143 C    LEU  153 1728      1253      1943     -336  360   - 4 3
ATOM   1144 O    LEU  153 8.709   22.506  37.193  1.000 13.24
ANISOU 1144 O    LEU  153 1617      1302      2109     -443  481   - 1 8 2
ATOM   1145 N    ASP  154 8.568   22.203  34.955  1.000 13.29
ANISOU 1145 N    ASP  154 1643      1457      1951       60 517 2 8 0
ATOM   1146 CA   ASP  154 7.195   22.671  34.764  1.000 14.21
ANISOU 1146 CA   ASP  154 1862      1255      2280      313  631   6 8 3
ATOM   1147 CB   ASP  154 6.995   23.269  33.373  1.000 18.38
ANISOU 1147 CB   ASP  154 2091      2156      2738      328  728   1 4 7 5
ATOM   1148 CG   ASP  154 5.534   23.367  32.929  1.000 22.95
ANISOU 1148 CG   ASP  154 2323      3543      2855      676  430   1 5 0 1
ATOM   1149 OD1  ASP  154 4.685   23.607  33.820  1.000 20.85
ANISOU 1149 OD1  ASP  154 2164      2368      3389      895  478   1 1 4 4
ATOM   1150 OD2  ASP  154 5.168   23.254  31.702  1.000 24.33
ANISOU 1150 OD2  ASP  154 2989      3146      3110      228   48 1 1 2 8
ATOM   1151 C    ASP  154 6.294   21.455  34.985  1.000 11.22
ANISOU 1151 C    ASP  154 1594      1403      1265      123  147   4 1 0
ATOM   1152 O    ASP  154 6.043   20.729  34.015  1.000 13.31
ANISOU 1152 O    ASP  154 2143      1728      1186      427  219   1 7 0
ATOM   1153 N    CYS  155 5.891   21.220  36.233  1.000 9.91
ANISOU 1153 N    CYS  155 1425      1098      1243      -76  186   2 7
ATOM   1154 CA   CYS  155 5.446   19.881  36.627  1.000 9.41
ANISOU 1154 CA   CYS  155 1294      1168      1115      -13  154   1 7 2
ATOM   1155 CB   CYS  155 6.635   19.171  37.269  1.000 10.64
ANISOU 1155 CB   CYS  155 1276      1015      1753       28 -51  - 1 2 2
ATOM   1156 SG   CYS  155 7.316   19.819  38.797  1.000 12.01
ANISOU 1156 SG   CYS  155 1376      1554      1633     -195  -199 9 5
ATOM   1157 C    CYS  155 4.138   19.885  37.423  1.000 9.66
ANISOU 1157 C    CYS  155 1301      1355      1013      115  146   2 1 6
ATOM   1158 O    CYS  155 3.215   20.645  37.064  1.000 11.61
ANISOU 1158 O    CYS  155 1349      1386      1676      130  116   2 9 4
ATOM   1159 N    GLU  156 4.021   19.033  38.442  1.000 10.26
ANISOU 1159 N    GLU  156 1263      1495      1139      -29  168   2 9 9
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ATOM    1160 CA   GLU   156 2.778    18.787 39.173 1.000 9.04
ANISOU  1160 CA   GLU   156 998 1160      1278    -76    -37 236
ATOM    1161 CB   GLU   156 2.300    17.391 38.772 1.000 11.63
ANISOU  1161 CB   GLU   156 1187    1348    1885    -67   -135 -190
ATOM    1162 CG   GLU   156 1.841    17.282 37.326 1.000 14.29
ANISOU  1162 CG   GLU   156 1741    1640    2049   -628   -507 5 0
ATOM    1163 CD   GLU   156 0.502    17.949 37.039 1.000 17.90
ANISOU  1163 CD   GLU   156 1772    2692    2336   -365   -686 137
ATOM    1164 OE1  GLU   156 -0.220   18.241 38.024 1.000 19.17
ANISOU  1164 OE1  GLU   156 1429    2973    2884   -632   -270 253
ATOM    1165 OE2  GLU   156 0.136    18.198 35.858 1.000 22.03
ANISOU  1165 OE2  GLU   156 2449    3269    2653   -243   -721 924
ATOM    1166 C    GLU   156 2.961    18.942 40.677 1.000 9.21
ANISOU  1166 C    GLU   156 1166    1135    1197    -26    239 183
ATOM    1167 O    GLU   156 2.828    17.997 41.476 1.000 11.22
ANISOU  1167 O    GLU   156 1631    1199    1434    103    162 4 31
ATOM    1168 N    PRO   157 3.337    20.158 41.118 1.000 10.29
ANISOU  1168 N    PRO   157 1329    1201    1381   -109    21 123
ATOM    1169 CD   PRO   157 3.527    21.407 40.359 1.000 10.17
ANISOU  1169 CD   PRO   157 1381    1093    1391    -40    -30 2 1
ATOM    1170 CA   PRO   157 3.618    20.363 42.553 1.000 10.28
ANISOU  1170 CA   PRO   157 1160    1354    1391    -12    -61 6 4
ATOM    1171 CB   PRO   157 4.173    21.805 42.590 1.000 12.44
ANISOU  1171 CB   PRO   157 1832    1567    1330   -397    20 5 8
ATOM    1172 CG   PRO   157 3.475    22.471 41.429 1.000 10.44
ANISOU  1172 CG   PRO   157 1469    1259    1237   -388    166 -15
ATOM    1173 C    PRO   157 2.387    20.269 43.450 1.000 10.83
ANISOU  1173 C    PRO   157 1206    1554    1357    -89    -61 7 6
ATOM    1174 O    PRO   157 1.247    20.422 42.992 1.000 11.38
ANISOU  1174 O    PRO   157 1157    1742    1426    -93    -64 3 3
ATOM    1175 N    LEU   158 2.561    19.988 44.742 1.000 9.91
ANISOU  1175 N    LEU   158 1011    1308    1447    -86    -53 15 1
ATOM    1176 CA   LEU   158 1.524    19.940 45.764 1.000 10.85
ANISOU  1176 CA   LEU   158 1319    1461    1344   -387    -2 - 3
ATOM    1177 CB   LEU   158 1.152    18.482 46.078 1.000 11.03
ANISOU  1177 CB   LEU   158 1280    1447    1464   -251    99 9 3
ATOM    1178 CG   LEU   158 0.111    18.239 47.155 1.000 12.01
ANISOU  1178 CG   LEU   158 1271    1497    1795   -303    241 1 2 8
ATOM    1179 CD1  LEU   158 -1.212   18.826 46.736 1.000 16.21
ANISOU  1179 CD1  LEU   158 1224    2249    2685   -111    41 -239
ATOM    1180 CD2  LEU   158 -0.086   16.736 47.397 1.000 17.17
ANISOU  1180 CD2  LEU   158 2656    1542    2325   -254   1273 174
ATOM    1181 C    LEU   158 1.997    20.626 47.048 1.000 11.22
ANISOU  1181 C    LEU   158 1496    1366    1402    110   -304 5
ATOM    1182 O    LEU   158 3.056    20.201 47.539 1.000 11.28
ANISOU  1182 O    LEU   158 1283    1368    1635    20   -262 7 5
ATOM    1183 N    LEU   159 1.234    21.599 47.548 1.000 10.86
ANISOU  1183 N    LEU   159 1103    1744    1278    68   -180 - 70
ATOM    1184 CA   LEU   159 1.540    22.278 48.797 1.000 11.62
ANISOU  1184 CA   LEU   159 1247    1761    1407    -59    -68 -180
ATOM    1185 CB   LEU   159 1.494    23.802 48.640 1.000 12.44
ANISOU  1185 CB   LEU   159 1624    1747    1354   -209    -73 - 3 3
ATOM    1186 CG   LEU   159 1.633    24.635 49.934 1.000 12.83
ANISOU  1186 CG   LEU   159 1600    1698    1576    246    -54 - 215
ATOM    1187 CD1  LEU   159 2.947    24.435 50.651 1.000 14.28
ANISOU  1187 CD1  LEU   159 2019    2250    1158    177   -292 104
ATOM    1188 CD2  LEU   159 1.442    26.134 49.640 1.000 13.33
ANISOU  1188 CD2  LEU   159 1802    1721    1543    87    -87 - 2 0
ATOM    1189 C    LEU   159 0.537    21.846 49.868 1.000 11.24
ANISOU  1189 C    LEU   159 1393    1474    1404   -174    -9 - 271
ATOM    1190 O    LEU   159 -0.665   21.940 49.620 1.000 13.70
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ANISOU 1190 O    LEU  159 1354    2395     1457      -328  34 -269
ATOM   1191 N    ARG  160 1.013   21.385   51.010    1.000 14.59
ANISOU 1191 N    ARG  160 1737    2569     1239      -390 -128 -224
ATOM   1192 CA   ARG  160 0.158   21.030   52.153    1.000 13.94
ANISOU 1192 CA   ARG  160 1265    2631     1402      157  -137 9 2
ATOM   1193 CB   ARG  160 0.161   19.528   52.343    1.000 18.20
ANISOU 1193 CB   ARG  160 1932    2645     2338      -301  32 193
ATOM   1194 CG   ARG  160 -0.423  18.661   51.252    1.000 25.12
ANISOU 1194 CG   ARG  160 3451    2902     3191      -653 -787 2 3
ATOM   1195 CD   ARG  160 -0.765  17.301   51.831    1.000 31.98
ANISOU 1195 CD   ARG  160 4825    3598     3729      -1994 -905 321
ATOM   1196 NE   ARG  160 -1.284  16.322   50.896    1.000 26.15
ANISOU 1196 NE   ARG  160 3392    2957     3587      -739 -1056 310
ATOM   1197 CZ   ARG  160 -0.970  15.044   50.779    1.000 25.30
ANISOU 1197 CZ   ARG  160 3195    3390     3028      94 -785  295
ATOM   1198 NH1  ARG  160 -0.063  14.433   51.552    1.000 31.26
ANISOU 1198 NH1  ARG  160 3654    4142     4080      -629 -1089 2054
ATOM   1199 NH2  ARG  160 -1.572  14.308   49.850    1.000 28.82
ANISOU 1199 NH2  ARG  160 4020    3122     3807      -13  -966 -90
ATOM   1200 C    ARG  160 0.649   21.669   53.447    1.000 15.12
ANISOU 1200 C    ARG  160 1649    2863     1232      104  -66  125
ATOM   1201 O    ARG  160 1.804   21.556   53.863    1.000 17.09
ANISOU 1201 O    ARG  160 1291    3411     1791      -400  74 -812
ATOM   1202 N    PHE  161 -0.258  22.369   54.114    1.000 14.95
ANISOU 1202 N    PHE  161 1512    2506     1660      -253  -8 -146
ATOM   1203 CA   PHE  161 -0.036  22.949   55.427    1.000 13.27
ANISOU 1203 CA   PHE  161 1600    1681     1760      -9 -249  -4 1
ATOM   1204 CB   PHE  161 -0.587  24.381   55.472    1.000 16.82
ANISOU 1204 CB   PHE  161 1594    1947     2851      384   58 6 4
ATOM   1205 CG   PHE  161 -0.317  25.109   56.771    1.000 22.56
ANISOU 1205 CG   PHE  161 2464    2424     3684      -39   790  -1067
ATOM   1206 CD1  PHE  161 -1.175  25.010   57.849    1.000 26.03
ANISOU 1206 CD1  PHE  161 3353    2919     3620      267  1106 -702
ATOM   1207 CD2  PHE  161 0.822   25.901   56.885    1.000 25.34
ANISOU 1207 CD2  PHE  161 2353    3265     4011      -179 -161 -738
ATOM   1208 CE1  PHE  161 -0.943  25.660   59.051    1.000 30.50
ANISOU 1208 CE1  PHE  161 4784    3324     3481      -972 1456 -620
ATOM   1209 CE2  PHE  161 1.061   26.553   58.080    1.000 26.10
ANISOU 1209 CE2  PHE  161 2546    3067     4302      -129  281  -1127
ATOM   1210 CZ   PHE  161 0.199   26.438   59.164    1.000 30.06
ANISOU 1210 CZ   PHE  161 3839    3197     4386      -152  774  -677
ATOM   1211 C    PHE  161 -0.737  22.073   56.447    1.000 13.93
ANISOU 1211 C    PHE  161 1842    1946     1503      -334 -277 -240
ATOM   1212 O    PHE  161 -1.916  21.843   56.270    1.000 18.26
ANISOU 1212 O    PHE  161 2000    3277     1662      -744 -399 475
ATOM   1213 N    ARG  162 -0.090  21.631   57.503    1.000 16.29
ANISOU 1213 N    ARG  162 2063    2516     1610      -937 -523 7 7
ATOM   1214 CA   ARG  162 -0.635  20.719   58.483    1.000 15.62
ANISOU 1214 CA   ARG  162 1772    2512     1650      -519 -266 7 6
ATOM   1215 C    ARG  162 -0.476  21.312   59.890    1.000 17.48
ANISOU 1215 C    ARG  162 1855    3131     1656      -603 -186 -76
ATOM   1216 O    ARG  162 0.609   21.734   60.251    1.000 17.23
ANISOU 1216 O    ARG  162 1928    3063     1557      -771 -42  -160
ATOM   1217 CB   ARG  162 0.081   19.374   58.458    1.000 21.99
ANISOU 1217 CB   ARG  162 3309    2318     2727      -272 -737 -2 2
ATOM   1218 CG   ARG  162 -0.573  18.322   59.348    1.000 26.07
ANISOU 1218 CG   ARG  162 3488    2375     4041      489   655  280
ATOM   1219 CD   ARG  162 -0.231  16.896   58.886    1.000 25.85
ANISOU 1219 CD   ARG  162 3106    2221     4495      418  -2 239
ATOM   1220 NE   ARG  162 -0.943  15.916   59.698    1.000 28.83
ANISOU 1220 NE   ARG  162 4379    2437     4139      -181  332  -177
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ATOM   1221 CZ  ARG  162 -0.642  14.638  59.879 1.000 27.99
ANISOU 1221 CZ  ARG  162 4271    2497    3868   -179  962   8   4
ATOM   1222 NH1 ARG  162  0.429  14.119  59.273 1.000 26.61
ANISOU 1222 NH1 ARG  162 3200    3167    3742   -91  -126  -2 6 8
ATOM   1223 NH2 ARG  162 -1.408  13.883  60.658 1.000 34.20
ANISOU 1223 NH2 ARG  162 3807    3522    5663   -986  702   7 80
ATOM   1224 N   TYR  163 -1.570  21.296  60.622 1.000 16.77
ANISOU 1224 N   TYR  163 1803    2865    1705   -484 -194   8   4
ATOM   1225 CA  TYR  163 -1.627  21.749  61.997 1.000 16.73
ANISOU 1225 CA  TYR  163 1819    2770    1766   -692  -51   4   0
ATOM   1226 CB  TYR  163 -2.712  22.804  62.116 1.000 18.99
ANISOU 1226 CB  TYR  163 2479    2560    2175   -427 -303  -2 14
ATOM   1227 CG  TYR  163 -3.173  23.206  63.488 1.000 23.52
ANISOU 1227 CG  TYR  163 2573    3821    2544   -16  -335  -8 68
ATOM   1228 CD1 TYR  163 -2.316  23.848  64.367 1.000 31.80
ANISOU 1228 CD1 TYR  163 3613    5005    3466   -1151 304  -2338
ATOM   1229 CE1 TYR  163 -2.731  24.222  65.625 1.000 40.74
ANISOU 1229 CE1 TYR  163 5855    5676    3950   -1906 976  -3116
ATOM   1230 CD2 TYR  163 -4.459  22.965  63.931 1.000 32.55
ANISOU 1230 CD2 TYR  163 3307    5654    3408   -1066 639  -2340
ATOM   1231 CE2 TYR  163 -4.902  23.332  65.189 1.000 42.99
ANISOU 1231 CE2 TYR  163 5626    6630    4080   -2352 1989 -2949
ATOM   1232 CZ  TYR  163 -4.017  23.960  66.025 1.000 42.52
ANISOU 1232 CZ  TYR  163 6281    5799    4075   -1721 1943 -3714
ATOM   1233 OH  TYR  163 -4.380  24.351  67.274 1.000 48.87
ANISOU 1233 OH  TYR  163 8167    6831    3569   -269  1801 -3052
ATOM   1234 C   TYR  163 -1.935  20.551  62.896 1.000 17.90
ANISOU 1234 C   TYR  163 2872    2353    1575   -894 -465 -173
ATOM   1235 O   TYR  163 -2.933  19.858  62.653 1.000 18.12
ANISOU 1235 O   TYR  163 2694    2130    2060   -732 -615 6 7
ATOM   1236 N   PHE  164 -1.112  20.326  63.898 1.000 18.32
ANISOU 1236 N   PHE  164 2516    2621    1826   -614 -402 -9 0
ATOM   1237 CA  PHE  164 -1.340  19.381  64.984 1.000 23.44
ANISOU 1237 CA  PHE  164 4176    2692    2038   -727 -669 219
ATOM   1238 CB  PHE  164 -0.073  18.617  65.327 1.000 26.02
ANISOU 1238 CB  PHE  164 4594    2824    2470   -459 -822 379
ATOM   1239 CG  PHE  164  0.407  17.669  64.231 1.000 29.00
ANISOU 1239 CG  PHE  164 4118    3639    3263   -518 -427 -254
ATOM   1240 CD1 PHE  164  1.224  18.118  63.205 1.000 27.11
ANISOU 1240 CD1 PHE  164 3040    4013    3249   -198 -821 4
ATOM   1241 CD2 PHE  164  0.051  16.332  64.240 1.000 28.37
ANISOU 1241 CD2 PHE  164 3935    3139    3704   472  30 -64
ATOM   1242 CE1 PHE  164  1.657  17.248  62.223 1.000 28.13
ANISOU 1242 CE1 PHE  164 2730    3926    4034   -43 -229 6
ATOM   1243 CE2 PHE  164  0.459  15.464  63.250 1.000 31.71
ANISOU 1243 CE2 PHE  164 4719    3694    3635   -293  657  -383
ATOM   1244 CZ  PHE  164  1.276  15.924  62.234 1.000 30.26
ANISOU 1244 CZ  PHE  164 3827    3808    3862   0   300  126
ATOM   1245 C   PHE  164 -1.775  20.160  66.228 1.000 24.65
ANISOU 1245 C   PHE  164 3541    4049    1777   -1025 -455 3 7
ATOM   1246 O   PHE  164 -0.889  20.713  66.885 1.000 25.54
ANISOU 1246 O   PHE  164 3520    4167    2019   -921 -440 -257
ATOM   1247 N   PRO  165 -3.058  20.293  66.527 1.000 32.24
ANISOU 1247 N   PRO  165 3641    5095    3513   -1894 266  -680
ATOM   1248 CA  PRO  165 -3.486  21.012  67.720 1.000 32.98
ANISOU 1248 CA  PRO  165 3570    5737    3225   -1271 397  -322
ATOM   1249 C   PRO  165 -2.854  20.429  68.986 1.000 38.48
ANISOU 1249 C   PRO  165 4355    6808    3457   -1872 40 343
ATOM   1250 O   PRO  165 -2.551  19.230  69.034 1.000 53.87
ANISOU 1250 O   PRO  165 9948    7012    3507   -959  692  1750
ATOM   1251 CB  PRO  165 -5.001  20.820  67.769 1.000 37.76
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ANISOU 1251 CB  PRO  165 3640     6479     4227     -1488 380  -717
ATOM   1252 CG  PRO  165 -5.417   20.048   66.569   1.000 36.16
ANISOU 1252 CG  PRO  165 3341     6449     3948     -518  -349 -398
ATOM   1253 CD  PRO  165 -4.197   19.816   65.734   1.000 35.70
ANISOU 1253 CD  PRO  165 3440     6296     3828     -1656 -5   -604
ATOM   1254 N   LEU  178 4.459    8.087    66.987   1.000 36.23
ANISOU 1254 N   LEU  178 4509     3338     5918     -26   1216 1175
ATOM   1255 CA  LEU  178 4.994    9.117    66.116   1.000 28.63
ANISOU 1255 CA  LEU  178 3397     3170     4312     377   1344 401
ATOM   1256 CB  LEU  178 5.882    8.534    65.027   1.000 30.08
ANISOU 1256 CB  LEU  178 3497     3245     4688     760   752  -620
ATOM   1257 CG  LEU  178 7.245    7.948    65.348   1.000 29.43
ANISOU 1257 CG  LEU  178 3557     2950     4674     667   371  -979
ATOM   1258 CD1 LEU  178 7.859    7.367    64.073   1.000 32.13
ANISOU 1258 CD1 LEU  178 2972     4524     4713     586   810  -790
ATOM   1259 CD2 LEU  178 8.208    8.964    65.937   1.000 41.71
ANISOU 1259 CD2 LEU  178 5303     3695     6850     356   -1656 -1154
ATOM   1260 C   LEU  178 3.885    9.909    65.420   1.000 27.18
ANISOU 1260 C   LEU  178 2107     3534     4686     -175  1776 833
ATOM   1261 O   LEU  178 2.845    9.351    65.086   1.000 39.60
ANISOU 1261 O   LEU  178 2407     4624     8016     -1253 1290 2183
ATOM   1262 N   ARG  179 4.128    11.200   65.160   1.000 25.65
ANISOU 1262 N   ARG  179 2220     3437     4089     -216  878  741
ATOM   1263 CA  ARG  179 3.231    11.973   64.321   1.000 25.04
ANISOU 1263 CA  ARG  179 1860     3289     4365     69    641  15
ATOM   1264 C   ARG  179 3.297    11.572   62.852   1.000 24.51
ANISOU 1264 C   ARG  179 2158     2721     4434     39    99   -89
ATOM   1265 O   ARG  179 2.295    11.687   62.139   1.000 28.60
ANISOU 1265 O   ARG  179 2545     3242     5079     441   -332 -256
ATOM   1266 CB  ARG  179 3.517    13.480   64.451   1.000 28.58
ANISOU 1266 CB  ARG  179 3980     3317     3561     -110  -843 57
ATOM   1267 CG  ARG  179 2.936    14.092   65.724   1.000 30.01
ANISOU 1267 CG  ARG  179 3817     3725     3862     57    -957 -372
ATOM   1268 CD  ARG  179 3.307    15.570   65.757   1.000 31.51
ANISOU 1268 CD  ARG  179 4457     3675     3840     90    -1514 -338
ATOM   1269 NE  ARG  179 2.925    16.126   67.058   1.000 37.82
ANISOU 1269 NE  ARG  179 7035     3190     4144     153   -310 -15
ATOM   1270 CZ  ARG  179 2.897    17.425   67.292   1.000 39.43
ANISOU 1270 CZ  ARG  179 8420     3029     3532     -479  580  400
ATOM   1271 NH1 ARG  179 3.213    18.286   66.331   1.000 59.73
ANISOU 1271 NH1 ARG  179 11745    4676     6273     -1045 3177 1722
ATOM   1272 NH2 ARG  179 2.548    17.896   68.457   1.000 33.13
ANISOU 1272 NH2 ARG  179 5661     3832     3094     275   -1463 -173
ATOM   1273 N   MET  180 4.455    11.099   62.424   1.000 21.43
ANISOU 1273 N   MET  180 2013     2457     3674     -395  108  -222
ATOM   1274 CA  MET  180 4.695    10.539   61.108   1.000 20.07
ANISOU 1274 CA  MET  180 2346     1965     3315     -349  -300 151
ATOM   1275 C   MET  180 5.802    9.482    61.182   1.000 17.33
ANISOU 1275 C   MET  180 2251     2080     2254     -332  -86  337
ATOM   1276 O   MET  180 6.894    9.757    61.677   1.000 18.52
ANISOU 1276 O   MET  180 2237     2019     2781     -398  -79  52
ATOM   1277 CB  MET  180 5.041    11.646   60.136   1.000 22.64
ANISOU 1277 CB  MET  180 2571     2321     3709     -197  -549 683
ATOM   1278 CG  MET  180 5.065    11.367   58.678   1.000 27.90
ANISOU 1278 CG  MET  180 3918     3095     3588     -453  -654 913
ATOM   1279 SD  MET  130 4.945    12.838   57.629   1.000 25.01
ANISOU 1279 SD  MET  180 2936     2942     3626     -399  124  851
ATOM   1280 CE  MET  180 4.385    12.010   56.147   1.000 37.00
ANISOU 1280 CE  MET  180 5917     3450     4690     -258  -2680 1204
ATOM   1281 N   ALA  181 5.467    8.295    60.680   1.000 16.99
ANISOU 1281 N   ALA  181 2144     2139     2174     -90   -558 299
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ATOM     1282 CA   ALA   181 6.396    7.168   60.676 1.000 16.12
ANISOU   1282 CA   ALA   181 2275    1958    1890    -171 -343 6 0 2
ATOM     1283 CB   ALA   181 5.668    5.891   60.279 1.000 20.24
ANISOU   1283 CB   ALA   181 2857    2158    2673    -648  694  1 0 6
ATOM     1284 C    ALA   181 7.576    7.409   59.738 1.000 15.43
ANISOU   1284 C    ALA   181 2223    1717    1925    -315 -369 4 3 2
ATOM     1285 O    ALA   181 7.458    8.198   58.783 1.000 15.49
ANISOU   1285 O    ALA   181 2268    1761    1858    -173 -296 4 3 4
ATOM     1286 N    PRO   182 8.698    6.733   59.986 1.000 16.03
ANISOU   1286 N    PRO   182 2517    1745    1829     32 -78 5 3 1
ATOM     1287 CD   PRO   182 8.983    5.802   61.101 1.000 19.61
ANISOU   1287 CD   PRO   182 2321    2908    2221    -210 -306 12 4 0
ATOM     1288 CA   PRO   182 9.865    6.907   59.076 1.000 14.78
ANISOU   1288 CA   PRO   182 2573    1336    1706    -101 -86  2 9 9
ATOM     1289 CB   PRO   182 10.914   5.948   59.649 1.000 16.20
ANISOU   1289 CB   PRO   182 2570    1978    1607     170 -251 7 7
ATOM     1290 CG   PRO   182 10.479   5.713   61.066 1.000 19.28
ANISOU   1290 CG   PRO   182 2301    3071    1952    -199 -245 10 0 1
ATOM     1291 C    PRO   182 9.541    6.571   57.627 1.000 14.90
ANISOU   1291 C    PRO   182 2230    1658    1772    -421 -262 3 4 0
ATOM     1292 O    PRO   182 8.920    5.573   57.249 1.000 15.38
ANISOU   1292 O    PRO   182 2301    1587    1957    -467 -482 5 3 9
ATOM     1293 N    HIS   183 9.969    7.460   56.730 1.000 12.28
ANISOU   1293 N    HIS   183 1737    1312    1617    -154 -284 1 5 6
ATOM     1294 CA   HIS   183 9.733    7.354   55.300 1.000 11.90
ANISOU   1294 CA   HIS   183 1413    1495    1614    -254 -351 3 5
ATOM     1295 CB   HIS   183 8.300    7.824   54.922 1.000 12.43
ANISOU   1295 CB   HIS   183 1399    1368    1957    -128 -241 1 1 2
ATOM     1296 CG   HIS   183 8.168    9.314   55.089 1.000 11.36
ANISOU   1296 CG   HIS   183 1349    1369    1600    -367 -296 5 6
ATOM     1297 CD2  HIS   183 8.259   10.374   54.249 1.000 12.03
ANISOU   1297 CD2  HIS   183 1684    1296    1589    -43   157  - 1 0
ATOM     1298 ND1  HIS   183 7.989    9.858   56.339 1.000 13.27
ANISOU   1298 ND1  HIS   183 1901    1439    1700    -65   267  1 9 3
ATOM     1299 CE1  HIS   183 7.943   11.187   56.244 1.000 12.43
ANISOU   1299 CE1  HIS   183 1939    1490    1296     77 -244  1 5 0
ATOM     1300 NE2  HIS   183 8.101   11.515   54.992 1.000 11.04
ANISOU   1300 NE2  HIS   183 1560    1437    1199     215  -232 4 8
ATOM     1301 C    HIS   183 10.749   8.176   54.515 1.000 12.27
ANISOU   1301 C    HIS   183 1446    1639    1577    -303 -282 - 6 7
ATOM     1302 O    HIS   183 11.433   9.032   55.064 1.000 12.94
ANISOU   1302 O    HIS   183 1496    1915    1505    -558 -292 1 5
ATOM     1303 N    TYR   184 10.849   7.907   53.215 1.000 10.61
ANISOU   1303 N    TYR   184 1453    1027    1552    -41  -380 1 1 0
ATOM     1304 CA   TYR   184 11.483   8.800   52.256 1.000 11.36
ANISOU   1304 CA   TYR   184 1475    1104    1738    -71  -264 1 7 8
ATOM     1305 CB   TYR   184 12.628   8.151   51.481 1.000 11.79
ANISOU   1305 CB   TYR   184 1631    1114    1734    -62  -197 3 4
ATOM     1306 CG   TYR   184 12.368   6.907   50.677 1.000 11.29
ANISOU   1306 CG   TYR   184 1680     921    1688     225  -893 1 7 4
ATOM     1307 CD1  TYR   184 12.156   5.659   51.268 1.000 11.76
ANISOU   1307 CD1  TYR   184 1663     927    1879     388  -487 1 9 0
ATOM     1308 CE1  TYR   184 11.911   4.526   50.492 1.000 12.64
ANISOU   1308 CE1  TYR   184 1960     878    1964     173   -40 1 8 2
ATOM     1309 CD2  TYR   184 12.333   6.949   49.279 1.000 11.13
ANISOU   1309 CD2  TYR   184 1252    1302    1674     109  -283 9 3
ATOM     1310 CE2  TYR   184 12.102   5.834   48.502 1.000 12.93
ANISOU   1310 CE2  TYR   184 1944    1422    1546     49 -384  7 3
ATOM     1311 CZ   TYR   184 11.898   4.611   49.121 1.000 13.14
ANISOU   1311 CZ   TYR   184 1717    1304    1972     30 -611  6 7
ATOM     1312 OH   TYR   184 11.663   3.490   48.343 1.000 15.45
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ANISOU 1312 OH  TYR  184 2028      1471     2373        42 -476   - 247
ATOM   1313 C   TYR  184 10.447    9.390    51.314     1.000 11.50
ANISOU 1313 C   TYR  184 1445      1215     1709      -187  -201 3 48
ATOM   1314 O   TYR  184 9.362     8.797    51.089     1.000 11.75
ANISOU 1314 O   TYR  184 1305      1308     1853      -106  -171 4 27
ATOM   1315 N   ASP  185 10.784    10.557   50.743     1.000 10.79
ANISOU 1315 N   ASP  185 1581      1069     1449      -141  -132 1 18
ATOM   1316 CA  ASP  185 9.861     11.218   49.815     1.000 9.10
ANISOU 1316 CA  ASP  185 1089      1093     1277      -326   23 2 06
ATOM   1317 CB  ASP  185 9.934     12.743   49.886     1.000 10.13
ANISOU 1317 CB  ASP  185 1427      1095     1327      -298  -178 1 77
ATOM   1318 CG  ASP  185 9.540     13.388   51.185     1.000 11.79
ANISOU 1318 CG  ASP  185 1797      1350     1333      -250  -149 1 1
ATOM   1319 OD1 ASP  185 9.681     14.638   51.278     1.000 13.79
ANISOU 1319 OD1 ASP  185 2050      1316     1875       135   -52  - 26
ATOM   1320 OD2 ASP  185 9.114     12.755   52.189     1.000 13.31
ANISOU 1320 OD2 ASP  185 1805      1848     1405      -411   -63  1 05
ATOM   1321 C   ASP  185 10.098    10.759   48.371     1.000 9.44
ANISOU 1321 C   ASP  185 1036      1150     1401      -309   -26  1 00
ATOM   1322 O   ASP  185 11.234    10.469   48.005     1.000 10.64
ANISOU 1322 O   ASP  185 1167      1376     1500      -127   -35  - 206
ATOM   1323 N   LEU  186 9.038     10.684   47.568     1.000 10.09
ANISOU 1323 N   LEU  186 1211      1186     1437      -272  -177 - 5 8
ATOM   1324 CA  LEU  186 9.124     10.312   46.161     1.000 10.60
ANISOU 1324 CA  LEU  186 1641      986 1401    -239   -52  - 44
ATOM   1325 CB  LEU  186 8.030     9.295    45.798     1.000 11.32
ANISOU 1325 CB  LEU  186 1652      929 1721    -111   17  - 479
ATOM   1326 CG  LEU  186 7.989     7.977    46.602     1.000 12.60
ANISOU 1326 CG  LEU  186 1408      1039     2340      -263  -200 - 166
ATOM   1327 CD1 LEU  186 6.896     7.064    46.028     1.000 16.64
ANISOU 1327 CD1 LEU  186 1900      1373     3049      -634  -398 - 135
ATOM   1328 CD2 LEU  186 9.356     7.332    46.629     1.000 13.84
ANISOU 1328 CD2 LEU  186 1438      1245     2575      -155   443  2 8 3
ATOM   1329 C   LEU  186 9.024     11.521   45.223     1.000 10.90
ANISOU 1329 C   LEU  186 1327      1211     1603        -3 -451   1 6 4
ATOM   1330 O   LEU  186 8.768     11.406   44.031     1.000 13.60
ANISOU 1330 O   LEU  186 2067      1608     1494      -211  -321 1 03
ATOM   1331 N   SER  187 9.264     12.705   45.734     1.000 10.71
ANISOU 1331 N   SER  187 1546      1129     1393       -76  -282 3 18
ATOM   1332 CA  SER  187 9.401     13.943   44.998     1.000 10.49
ANISOU 1332 CA  SER  187 1427      1191     1370       195  -107 4 88
ATOM   1333 CB  SER  187 9.221     15.103   46.002     1.000 10.56
ANISOU 1333 CB  SER  187 1105      1048     1857       298   161  5 3 2
ATOM   1334 OG  SER  187 10.430    14.918   46.726     1.000 13.01
ANISOU 1334 OG  SER  187 1343      1432     2169      -132  -295 2 01
ATOM   1335 C   SER  187 10.774    14.062   44.336     1.000 10.47
ANISOU 1335 C   SER  187 1447      862 1669     135    -3 1 4 5
ATOM   1336 O   SER  187 11.684    13.246   44.513     1.000 10.54
ANISOU 1336 O   SER  187 1577      799 1629     183   -91 - 7 7
ATOM   1337 N   MET  188 10.962    15.095   43.502     1.000 9.78
ANISOU 1337 N   MET  188 1419      978 1318     147    44 7 4
ATOM   1338 CA  MET  188 12.267    15.584   43.065     1.000 9.94
ANISOU 1338 CA  MET  188 1394      942 1441     182    58 3 7
ATOM   1339 CB  MET  188 12.128    16.543   41.891     1.000 10.89
ANISOU 1339 CB  MET  188 1523      840 1774     98 48 2 27
ATOM   1340 CG  MET  188 13.385    17.258   41.470     1.000 11.40
ANISOU 1340 CG  MET  188 1403      1172     1756        46 -51 2 14
ATOM   1341 SD  MET  188 14.687    16.134   40.891     1.000 12.71
ANISOU 1341 SD  MET  188 1619      1272     1940       139   137  1 9 8
ATOM   1342 CE  MET  188 16.061    17.267   40.790     1.000 13.86
ANISOU 1342 CE  MET  188 1862      1399     2003        -2 911  - 90
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ATOM    1343  C    MET  188  12.946   16.217  44.291  1.000 12.13
ANISOU  1343  C    MET  188  1325     1586    1698     169   -18  -285
ATOM    1344  O    MET  188  13.971   15.727  44.804  1.000 11.52
ANISOU  1344  O    MET  188  1288     1553    1535     144   132    8 7
ATOM    1345  N    VAL  189  12.362   17.290  44.838  1.000 10.00
ANISOU  1345  N    VAL  189  1290     1217    1292     53  -175    6
ATOM    1346  CA   VAL  189  12.745   17.894  46.099  1.000  9.70
ANISOU  1346  CA   VAL  189  1209     1057    1420    -212   -45   -1 9
ATOM    1347  CB   VAL  189  13.618   19.154  45.979  1.000  9.97
ANISOU  1347  CB   VAL  189  1288     1103    1398    -238   129  189
ATOM    1348  CG1  VAL  189  14.953   18.837  45.266  1.000 13.45
ANISOU  1348  CG1  VAL  189  1334     1410    2368    -236   390  14 3
ATOM    1349  CG2  VAL  189  12.899   20.289  45.264  1.000 12.24
ANISOU  1349  CG2  VAL  189  1715     1242    1693     -25   150  29 5
ATOM    1350  C    VAL  189  11.469   18.245  46.871  1.000 10.10
ANISOU  1350  C    VAL  189  1089     1600    1149    -456  -156  -7 3
ATOM    1351  O    VAL  189  10.405   18.399  46.250  1.000  9.53
ANISOU  1351  O    VAL  189  1153     1249    1217    -222  -190  8
ATOM    1352  N    THR  190  11.609   18.327  48.187  1.000  8.66
ANISOU  1352  N    THR  190  1273      894    1123     15  -202   127
ATOM    1353  CA   THR  190  10.565   18.771  49.091  1.000  9.64
ANISOU  1353  CA   THR  190  1350     1167    1147    -11   -228  -9 9
ATOM    1354  CB   THR  190  10.194   17.699  50.132  1.000 10.69
ANISOU  1354  CB   THR  190  1231     1196    1635    -300   121   -5 4
ATOM    1355  OG1  THR  190   9.662   16.586  49.501  1.000 12.45
ANISOU  1355  OG1  THR  190  1333     1341    2055    -140  -258  -4 8
ATOM    1356  CG2  THR  190   9.038   18.131  51.019  1.000 13.59
ANISOU  1356  CG2  THR  190  1121     2222    1821    -272   151  -1 95
ATOM    1357  C    THR  190  11.058   19.976  49.891  1.000  9.23
ANISOU  1357  C    THR  190  1257     1096    1152    -102  -336  -4 9
ATOM    1358  O    THR  190  12.149   19.867  50.447  1.000 10.54
ANISOU  1358  O    THR  190  1322     1292    1390     -5  -359  -1 22
ATOM    1359  N    LEU  191  10.313   21.064  49.978  1.000 10.23
ANISOU  1359  N    LEU  191  1319     1167    1401    -71  -177  -1 33
ATOM    1360  CA   LEU  191  10.691   22.241  50.770  1.000 10.19
ANISOU  1360  CA   LEU  191  1259     1176    1438     0   -294  -1 42
ATOM    1361  CB   LEU  191  10.604   23.511  49.910  1.000 11.52
ANISOU  1361  CB   LEU  191  1203     1185    1990    -118  -601 3 2
ATOM    1362  CG   LEU  191  11.897   23.898  49.167  1.000 13.23
ANISOU  1362  CG   LEU  191  1898     1710    1419    -391  -358 9 7
ATOM    1363  CD1  LEU  191  12.333   22.794  48.218  1.000 15.25
ANISOU  1363  CD1  LEU  191  1685     2018    2091    -476  -214  -3 05
ATOM    1364  CD2  LEU  191  11.717   25.231  48.448  1.000 17.46
ANISOU  1364  CD2  LEU  191  2310     2044    2281    -14    17 6 04
ATOM    1365  C    LEU  191   9.798   22.328  52.006  1.000 11.93
ANISOU  1365  C    LEU  191  1275     1677    1579     56  -190  -3 72
ATOM    1366  O    LEU  191   8.560   22.262  51.868  1.000 13.49
ANISOU  1366  O    LEU  191  1276     2173    1676     1   -192  -6 01
ATOM    1367  N    ILE  192  10.394   22.483  53.190  1.000 11.06
ANISOU  1367  N    ILE  192  1115     1603    1487    -111   -92   -1 08
ATOM    1368  CA   ILE  192   9.671   22.539  54.443  1.000 11.13
ANISOU  1368  CA   ILE  192  1071     1638    1521     11  -173   -1 49
ATOM    1369  CB   ILE  192   9.927   21.304  55.330  1.000 12.94
ANISOU  1369  CB   ILE  192  2099     1586    1232    -65    -9  -2 33
ATOM    1370  CG2  ILE  192   9.221   21.428  56.673  1.000 16.06
ANISOU  1370  CG2  ILE  192  2479     1983    1641    -206   426   -2 15
ATOM    1371  CG1  ILE  192   9.512   20.028  54.590  1.000 15.51
ANISOU  1371  CG1  ILE  192  2633     1658    1601    -400   -48   -1 75
ATOM    1372  CD1  ILE  192   9.845   18.765  55.339  1.000 25.71
ANISOU  1372  CD1  ILE  192  5869     1608    2290    -175  -1566  -3 01
ATOM    1373  C    ILE  192   9.966   23.809  55.253  1.000 11.47
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ANISOU 1373 C    ILE   192 1330     1603     1427     -4 -222  -122
ATOM   1374 O    ILE   192 11.123   24.106   55.567   1.000 13.33
ANISOU 1374 O    ILE   192 1344     1738     1981     -96  -289 -219
ATOM   1375 N    GLN   193 8.904    24.525   55.602   1.000 15.78
ANISOU 1375 N    GLN   193 1316     2462     2219     -64   -5 -975
ATOM   1376 CA   GLN   193 8.987    25.653   56.533   1.000 14.56
ANISOU 1376 CA   GLN   193 1582     1858     2091     212  -304 -529
ATOM   1377 CB   GLN   193 8.449    26.975   56.020   1.000 20.03
ANISOU 1377 CB   GLN   193 2226     2203     3180     318  -329 142
ATOM   1378 CG   GLN   193 9.203    27.684   54.914   1.000 23.86
ANISOU 1378 CG   GLN   193 3399     2492     3174     313   45 280
ATOM   1379 CD   GLN   193 8.665    29.079   54.675   1.000 22.92
ANISOU 1379 CD   GLN   193 3250     2363     3097     78 -477  205
ATOM   1380 OE1  GLN   193 7.603    29.292   54.099   1.000 27.68
ANISOU 1380 OE1  GLN   193 4175     3310     3031     552 -1214 2 9
ATOM   1381 NE2  GLN   193 9.411    30.075   55.134   1.000 27.01
ANISOU 1381 NE2  GLN   193 3187     2667     4408     -440 12 1 7
ATOM   1382 C    GLN   193 8.216    25.265   57.804   1.000 15.14
ANISOU 1382 C    GLN   193 1945     1827     1982     136  -174 -722
ATOM   1383 O    GLN   193 7.147    24.662   57.714   1.000 27.80
ANISOU 1383 O    GLN   193 2523     6225     1817     -1586 -592 235
ATOM   1384 N    GLN   194 8.714    25.552   58.978   1.000 19.80
ANISOU 1384 N    GLN   194 2994     2502     2025     -632 -752 3 3
ATOM   1385 CA   GLN   194 8.100    25.080   60.213   1.000 22.89
ANISOU 1385 CA   GLN   194 3961     2626     2110     493  -20  5 2
ATOM   1386 C    GLN   194 7.763    26.236   61.141   1.000 27.79
ANISOU 1386 C    GLN   194 4885     2757     2916     823   25 -262
ATOM   1387 O    GLN   194 8.424    27.258   60.983   1.000 30.03
ANISOU 1387 O    GLN   194 4727     3168     3516     368  -259 -9 1 0
ATOM   1388 CB   GLN   194 9.086    24.170   60.950   1.000 23.97
ANISOU 1388 CB   GLN   194 3952     3133     2021     846  483  3 5 2
ATOM   1389 CG   GLN   194 9.398    22.835   60.314   1.000 21.94
ANISOU 1389 CG   GLN   194 2740     3238     2358     683  -182 - 1 0
ATOM   1390 CD   GLN   194 10.546   22.148   61.052   1.000 20.51
ANISOU 1390 CD   GLN   194 2450     3433     1911     509  -321 -4 2 9
ATOM   1391 OE1  GLN   194 11.707   22.142   60.627   1.000 20.80
ANISOU 1391 OE1  GLN   194 2245     2996     2662     -171 -382 - 6 8 1
ATOM   1392 NE2  GLN   194 10.223   21.585   52.197   1.000 24.91
ANISOU 1392 NE2  GLN   194 2539     3902     3023     210  -365 760
ATOM   1393 N    THR   195 6.817    26.035   62.030   1.000 32.47
ANISOU 1393 N    THR   195 5716     2729     3891     1095 1056 -616
ATOM   1394 CA   THR   195 6.588    26.708   63.282   1.000 35.83
ANISOU 1394 CA   THR   195 6329     3539     3748     1011 999  -722
ATOM   1395 CB   THR   195 5.263    27.492   63.357   1.000 37.96
ANISOU 1395 CB   THR   195 5756     4304     4365     647  2095 -1151
ATOM   1396 OG1  THR   195 4.191    26.576   63.604   1.000 48.36
ANISOU 1396 OG1  THR   195 6874     6076     5423     -806 2581 -1842
ATOM   1397 CG2  THR   195 4.958    28.175   62.033   1.000 44.54
ANISOU 1397 CG2  THR   195 2944     7471     6510     -872 -963 621
ATOM   1398 C    THR   195 6.590    25.684   64.429   1.000 48.86
ANISOU 1398 C    THR   195 10133    4924     3508     -321 -1356 - 2 2 1
ATOM   1399 O    THR   195 6.122    24.544   64.293   1.000 64.12
ANISOU 1399 O    THR   195 13267    4150     6945     -264 -4541 1682
ATOM   1400 N    PHE   201 12.035   21.374   72.205   1.000 71.12
ANISOU 1400 N    PHE   201 13961    9034     4028     -5932 -1658 -1741
ATOM   1401 CA   PHE   201 11.775   20.053   71.629   1.000 49.44
ANISOU 1401 CA   PHE   201 7918     7543     3326     -3128 1317 -1488
ATOM   1402 CB   PHE   201 10.469   19.464   72.181   1.000 47.85
ANISOU 1402 CB   PHE   201 7119     6892     4168     -1869 1937 -1899
ATOM   1403 CG   PHE   201 10.130   18.113   71.545   1.000 46.41
ANISOU 1403 CG   PHE   201 6643     6596     4396     -2038 1879 -1497
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ATOM   1404 CD1 PHE  201 10.738  16.954  71.991 1.000 50.03
ANISOU 1404 CD1 PHE  201 7982    6634    4393   -2326 1092 -991
ATOM   1405 CD2 PHE  201 9.220   18.001  70.513 1.000 42.63
ANISOU 1405 CD2 PHE  201 5458    6427    4313   -1097 2449 -2268
ATOM   1406 CE1 PHE  201 10.434  15.739  71.417 1.000 49.95
ANISOU 1406 CE1 PHE  201 8275    6464    4240   -2047 227  -716
ATOM   1407 CE2 PHE  201 8.901   16.783  69.934 1.000 41.38
ANISOU 1407 CE2 PHE  201 6016    5946    3762   -578  2006 -1844
ATOM   1408 CZ  PHE  201 9.515   15.636  70.392 1.000 44.74
ANISOU 1408 CZ  PHE  201 7075    6261    3663   -1063 1020 -975
ATOM   1409 C   PHE  201 11.722  20.110  70.107 1.000 42.42
ANISOU 1409 C   PHE  201 6324    6442    3351   -1964 717  -1441
ATOM   1410 O   PHE  201 11.007  20.941  69.536 1.000 47.79
ANISOU 1410 O   PHE  201 9668    4400    4090   -762  691  -2416
ATOM   1411 N   VAL  202 12.477  19.232  69.449 1.000 34.04
ANISOU 1411 N   VAL  202 4525    5852    2558   -1948 7    -425
ATOM   1412 CA  VAL  202 12.535  19.245  67.093 1.000 25.09
ANISOU 1412 CA  VAL  202 3221    3752    2558   -1041 -182 9 9
ATOM   1413 CB  VAL  202 13.988  19.286  67.489 1.000 22.88
ANISOU 1413 CB  VAL  202 2832    3430    2432   -577  -691 -198
ATOM   1414 CG1 VAL  202 14.053  19.387  65.965 1.000 26.02
ANISOU 1414 CG1 VAL  202 3821    3594    2470   -958  35   -277
ATOM   1415 CG2 VAL  202 14.771  20.443  68.078 1.000 24.69
ANISOU 1415 CG2 VAL  202 3043    3473    2867   -786  -410 -320
ATOM   1416 C   VAL  202 11.798  18.035  67.421 1.000 20.69
ANISOU 1416 C   VAL  202 3027    2810    2023   -648  58 615
ATOM   1417 O   VAL  202 12.288  16.914  67.581 1.000 26.08
ANISOU 1417 O   VAL  202 3294    3219    3396   -136  452 884
ATOM   1418 N   SER  203 10.662  18.234  66.766 1.000 20.21
ANISOU 1418 N   SER  203 3100    2794    1787   -414  25 -152
ATOM   1419 CA  SER  203 9.820   17.192  66.218 1.000 20.37
ANISOU 1419 CA  SER  203 3149    2709    1884   -355  129 -256
ATOM   1420 CB  SER  203 8.437   17.779  65.896 1.000 24.72
ANISOU 1420 CB  SER  203 2726    4106    2558   -178  369 -1015
ATOM   1421 OG  SER  203 7.841   18.239  67.097 1.000 31.80
ANISOU 1421 OG  SER  203 3328    5782    2974   -457  1175 -1104
ATOM   1422 C   SER  203 10.367  16.524  64.958 1.000 19.13
ANISOU 1422 C   SER  203 2580    2647    2040   -339  170 -244
ATOM   1423 O   SER  203 10.279  15.302  64.832 1.000 17.01
ANISOU 1423 O   SER  203 2311    2625    1527   -414  206 -18
ATOM   1424 N   LEU  204 10.902  17.259  63.998 1.000 16.16
ANISOU 1424 N   LEU  204 2142    1976    2024   71 77 -292
ATOM   1425 CA  LEU  204 11.403  16.679  62.740 1.000 14.07
ANISOU 1425 CA  LEU  204 1670    1626    2049   -22  -24 -283
ATOM   1426 CB  LEU  204 11.269  17.704  61.618 1.000 13.80
ANISOU 1426 CB  LEU  204 1549    1763    1931   -249 -340 -277
ATOM   1427 CG  LEU  204 11.647  17.272  60.212 1.000 14.13
ANISOU 1427 CG  LEU  204 1726    1722    1919   -253 -482 -412
ATOM   1428 CD1 LEU  204 10.770  16.134  59.680 1.000 18.76
ANISOU 1428 CD1 LEU  204 2579    2895    1654   -1297 -927 -106
ATOM   1429 CD2 LEU  204 11.609  18.478  59.255 1.000 16.20
ANISOU 1429 CD2 LEU  204 1987    2095    2074   65 75 -123
ATOM   1430 C   LEU  204 12.832  16.140  62.885 1.000 14.81
ANISOU 1430 C   LEU  204 1734    1748    2144   9  -199 -250
ATOM   1431 O   LEU  204 13.699  16.853  63.397 1.000 15.52
ANISOU 1431 O   LEU  204 1833    1789    2274   -59  -435 -42
ATOM   1432 N   GLN  205 13.065  14.900  62.469 1.000 14.42
ANISOU 1432 N   GLN  205 1847    1804    1827   189  -120 -153
ATOM   1433 CA  GLN  205 14.288  14.143  62.574 1.000 12.76
ANISOU 1433 CA  GLN  205 1777    1655    1419   43 -347 -113
ATOM   1434 C   GLN  205 14.622  13.434  61.260 1.000 11.12
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ANISOU 1434 C   GLN 205 1412  1474  1338    49 -468   - 21
ATOM   1435 O   GLN 205 13.707 12.927 60.606 1.000 13.97
ANISOU 1435 O   GLN 205 1622  2235  1449  -293 -449 -147
ATOM   1436 CB  GLN 205 14.164 13.062 63.662 1.000 15.57
ANISOU 1436 CB  GLN 205 2421  1925  1568   341  151  8 3
ATOM   1437 CG  GLN 205 13.863 13.635 65.032 1.000 18.58
ANISOU 1437 CG  GLN 205 3321  2286  1451   689 -129  8 2
ATOM   1438 CD  GLN 205 15.086 14.243 65.680 1.000 24.33
ANISOU 1438 CD  GLN 205 3687  3465  2091   520 -499 -570
ATOM   1439 OE1 GLN 205 16.206 13.717 65.549 1.000 29.12
ANISOU 1439 OE1 GLN 205 3350  3464  4251    14 -270 -1800
ATOM   1440 NE2 GLN 205 14.840 15.356 66.378 1.000 23.01
ANISOU 1440 NE2 GLN 205 3055  2465  3225   335 -592 -140
ATOM   1441 N   ALA 206 15.893 13.401 60.893 1.000 12.63
ANISOU 1441 N   ALA 206 1523  1770  1506  -251 -234 - 6
ATOM   1442 CA  ALA 206 16.335 12.649 59.731 1.000 13.77
ANISOU 1442 CA  ALA 206 1392  2099  1742  -522  -72 -295
ATOM   1443 CB  ALA 206 16.693 13.519 58.528 1.000 16.34
ANISOU 1443 CB  ALA 206 2034  2494  1682  -603  123 -277
ATOM   1444 C   ALA 206 17.567 11.813 60.046 1.000 15.92
ANISOU 1444 C   ALA 206 1489  2331  2230  -290  179 -341
ATOM   1445 O   ALA 206 18.368 12.182 60.908 1.000 15.86
ANISOU 1445 O   ALA 206 1877  1772  2377   150 -356  3 0
ATOM   1446 N   GLU 207 17.707 10.712 59.305 1.000 16.98
ANISOU 1446 N   GLU 207 1981  2086  2383  -335  348 -186
ATOM   1447 CA  GLU 207 18.938 9.942 59.364 1.000 20.58
ANISOU 1447 CA  GLU 207 2198  1938  3684  -164  490 - 10
ATOM   1448 C   GLU 207 20.082 10.688 58.681 1.000 18.75
ANISOU 1448 C   GLU 207 1828  2037  3260   272  185  5 58
ATOM   1449 O   GLU 207 19.948 10.953 57.503 1.000 18.23
ANISOU 1449 O   GLU 207 1746  2145  3034    52 8  - 45
ATOM   1450 CB  GLU 207 18.665 8.612 58.676 1.000 25.81
ANISOU 1450 CB  GLU 207 3289  1794  4724   -19   83 -135
ATOM   1451 CG  GLU 207 19.879 7.737 58.429 1.000 30.08
ANISOU 1451 CG  GLU 207 4102  2221  5105   907 -948 -546
ATOM   1452 CD  GLU 207 19.429 6.356 57.959 1.000 29.93
ANISOU 1452 CD  GLU 207 5549  2024  3798  1179 -2099 -123
ATOM   1453 OE1 GLU 207 19.491 5.471 58.839 1.000 35.14
ANISOU 1453 OE1 GLU 207 5782  2692  4879   938 -931 8 85
ATOM   1454 OE2 GLU 207 19.037 6.251 56.762 1.000 38.62
ANISOU 1454 OE2 GLU 207 4955  5608  4109   135 -2494 -366
ATOM   1455 N   VAL 208 21.146 10.997 59.414 1.000 16.97
ANISOU 1455 N   VAL 208 1926  1974  2549   120  337  8 07
ATOM   1456 CA  VAL 208 22.376 11.593 58.902 1.000 17.77
ANISOU 1456 CA  VAL 208 1894  2109  2748    93 500 4 11
ATOM   1457 CB  VAL 208 22.455 13.111 59.155 1.000 16.89
ANISOU 1457 CB  VAL 208 2774  2148  1494  -372 -149 5 69
ATOM   1458 CG1 VAL 208 23.652 13.688 58.409 1.000 20.76
ANISOU 1458 CG1 VAL 208 3214  2150  2526  -423  647  1 48
ATOM   1459 CG2 VAL 208 21.172 13.815 58.720 1.000 16.36
ANISOU 1459 CG2 VAL 208 3146  1640  1431    25 98 353
ATOM   1460 C   VAL 208 23.585 10.877 59.507 1.000 20.29
ANISOU 1460 C   VAL 208 1936  2555  3217    11 -58 1 32
ATOM   1461 O   VAL 208 23.726 10.829 60.741 1.000 20.74
ANISOU 1461 O   VAL 208 2436  2256  3187   460  206  5 44
ATOM   1462 N   GLY 209 24.457 10.295 58.672 1.000 18.94
ANISOU 1462 N   GLY 209 1764  2445  2989   211 -494 1 5
ATOM   1463 CA  GLY 209 25.558 9.508 59.194 1.000 24.01
ANISOU 1463 CA  GLY 209 2171  3040  3910   549 -396 7 09
ATOM   1464 C   GLY 209 25.123 8.364 60.082 1.000 25.00
ANISOU 1464 C   GLY 209 2874  3156  3470  1406  772  6 49
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ATOM    1465 O    GLY  209 25.850   7.934  60.991 1.000 35.98
ANISOU  1465 O    GLY  209 4448    3946   5279   1425  -426 1769
ATOM    1466 N    GLY  210 23.951   7.786  59.869 1.000 25.89
ANISOU  1466 N    GLY  210 3802    2756   3278   523   899   749
ATOM    1467 CA   GLY  210 23.477   6.678  60.671 1.000 26.43
ANISOU  1467 CA   GLY  210 4479    2136   3427   1228  742   912
ATOM    1468 C    GLY  210 22.885   7.025  62.016 1.000 28.45
ANISOU  1468 C    GLY  210 5472    2099   3237   831   1029 1175
ATOM    1469 O    GLY  210 22.634   6.098  62.789 1.000 40.26
ANISOU  1469 O    GLY  210 7322    2719   5256   1881  2759 2360
ATOM    1470 N    ALA  211 22.651   8.281  62.338 1.000 25.78
ANISOU  1470 N    ALA  211 4671    2359   2763   1370  724  1197
ATOM    1471 CA   ALA  211 22.048   8.671  63.613 1.000 23.74
ANISOU  1471 CA   ALA  211 2966    3156   2896   727   339   663
ATOM    1472 CB   ALA  211 23.093   9.333  64.496 1.000 29.57
ANISOU  1472 CB   ALA  211 2957    4372   3906   834   -96   6 9
ATOM    1473 C    ALA  211 20.900   9.626  63.360 1.000 21.19
ANISOU  1473 C    ALA  211 3090    2611   2350   484   178   741
ATOM    1474 O    ALA  211 20.936  10.381  62.399 1.000 23.91
ANISOU  1474 O    ALA  211 3771    2659   2653   -30   -66   930
ATOM    1475 N    PHE  212 19.889   9.629  64.204 1.000 19.88
ANISOU  1475 N    PHE  212 2603    2577   2375   398  -128  374
ATOM    1476 CA   PHE  212 18.814  10.613  64.130 1.000 19.13
ANISOU  1476 CA   PHE  212 2581    2257   2432   284  -565  317
ATOM    1477 C    PHE  212 19.320  12.006  64.489 1.000 20.00
ANISOU  1477 C    PHE  212 3004    2480   2115   133  -640  6 8
ATOM    1478 O    PHE  212 19.893  12.230  65.569 1.000 21.10
ANISOU  1478 O    PHE  212 2497    3558   1964   -391 -406  222
ATOM    1479 CB   PHE  212 17.688  10.290  65.096 1.000 21.37
ANISOU  1479 CB   PHE  212 2553    2616   2952   293  -197 -184
ATOM    1480 CG   PHE  212 17.010   8.950  64.912 1.000 23.45
ANISOU  1480 CG   PHE  212 2161    3496   3253   -376 -282 -558
ATOM    1481 CD1  PHE  212 16.369   8.377  65.990 1.000 23.33
ANISOU  1481 CD1  PHE  212 2545    3115   3206   -382 -350 -508
ATOM    1482 CD2  PHE  212 17.029   8.302  63.687 1.000 25.83
ANISOU  1482 CD2  PHE  212 2554    3962   3299   -622 -217 -787
ATOM    1483 CE1  PHE  212 15.730   7.149  65.872 1.000 28.13
ANISOU  1483 CE1  PHE  212 3784    3544   3362  -1119  96  -973
ATOM    1484 CE2  PHE  212 16.419   7.072  63.569 1.000 23.04
ANISOU  1484 CE2  PHE  212 2504    2960   3289   382  -232 -558
ATOM    1485 CZ   PHE  212 15.781   6.486  64.651 1.000 27.88
ANISOU  1485 CZ   PHE  212 3658    3977   2957  -1072 -501 -760
ATOM    1486 N    THR  213 19.076  12.936  63.578 1.000 18.30
ANISOU  1486 N    THR  213 2690    2083   2181   149  -583 - 93
ATOM    1487 CA   THR  213 19.566  14.310  63.681 1.000 17.99
ANISOU  1487 CA   THR  213 1976    2139   2721   230  -686 -287
ATOM    1488 CB   THR  213 20.515  14.586  62.498 1.000 20.43
ANISOU  1488 CB   THR  213 1798    2280   3683   140  -119 -423
ATOM    1489 OG1  THR  213 21.638  13.695  62.629 1.000 25.33
ANISOU  1489 OG1  THR  213 2571    3378   3676   925   71  528
ATOM    1490 CG2  THR  213 21.087  15.985  62.485 1.000 21.11
ANISOU  1490 CG2  THR  213 1935    2667   3420   -310 -289 -747
ATOM    1491 C    THR  213 18.391  15.277  63.641 1.000 15.53
ANISOU  1491 C    THR  213 1732    2135   2032   111  -557 -167
ATOM    1492 O    THR  213 17.533  15.195  62.761 1.000 16.11
ANISOU  1492 O    THR  213 1742    2197   2180   -327 -669 5 6
ATOM    1493 N    ASP  214 18.362  16.199  64.590 1.000 15.60
ANISOU  1493 N    ASP  214 2025    2046   1857   64  -405   2
ATOM    1494 CA   ASP  214 17.380  17.256  64.672 1.000 15.59
ANISOU  1494 CA   ASP  214 2130    1722   2072   2  -1010 -242
ATOM    1495 CB   ASP  214 17.744  18.200  65.822 1.000 17.13
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ANISOU 1495 CB  ASP 214 2528     1893     2086    -226 -1022  -247
ATOM   1496 CG  ASP 214 17.612   17.672   67.219  1.000 20.21
ANISOU 1496 CG  ASP 214 3138     2495     2045    -451 -1276  -148
ATOM   1497 OD1 ASP 214 17.079   16.571   67.460  1.000 20.87
ANISOU 1497 OD1 ASP 214 2778     2632     2518    -247 -505 151
ATOM   1498 OD2 ASP 214 18.076   18.401   68.127  1.000 28.05
ANISOU 1498 OD2 ASP 214 5110     3118     2429    -257 -1997 -619
ATOM   1499 C   ASP 214 17.314   18.146   63.441  1.000 15.14
ANISOU 1499 C   ASP 214 2029     1822     1901    182  -574 -319
ATOM   1500 O   ASP 214 18.349   18.552   62.897  1.000 17.63
ANISOU 1500 O   ASP 214 1956     2032     2710    -214 -810 -15
ATOM   1501 N   LEU 215 16.105   18.493   63.027  1.000 14.69
ANISOU 1501 N   LEU 215 1936     1758     1887    38 -334  242
ATOM   1502 CA  LEU 215 15.915   19.504   61.979  1.000 13.35
ANISOU 1502 CA  LEU 215 1820     1753     1498    89 -22  5 9
ATOM   1503 CB  LEU 215 15.352   18.819   60.734  1.000 14.24
ANISOU 1503 CB  LEU 215 1735     2167     1506    -98   75 - 3
ATOM   1504 CG  LEU 215 16.291   17.813   60.056  1.000 16.39
ANISOU 1504 CG  LEU 215 2031     2285     1911    -340 320  -424
ATOM   1505 CD1 LEU 215 15.517   16.999   59.031  1.000 22.61
ANISOU 1505 CD1 LEU 215 3139     2024     3427    -10  -801 -877
ATOM   1506 CD2 LEU 215 17.482   18.543   59.434  1.000 26.93
ANISOU 1506 CD2 LEU 215 1998     5409     2827    -1083 909  -542
ATOM   1507 C   LEU 215 15.002   20.622   62.500  1.000 14.65
ANISOU 1507 C   LEU 215 1770     1607     2190    86 -165  -95
ATOM   1508 O   LEU 215 13.822   20.662   62.151  1.000 19.45
ANISOU 1508 O   LEU 215 1748     2165     3476    116  -303 -203
ATOM   1509 N   PRO 216 15.552   21.523   63.314  1.000 15.99
ANISOU 1509 N   PRO 216 2390     1970     1715    -164 21 -175
ATOM   1510 CD  PRO 216 16.955   21.601   63.757  1.000 19.37
ANISOU 1510 CD  PRO 216 2900     2306     2155    -83  -790 -548
ATOM   1511 CA  PRO 216 14.760   22.620   63.846  1.000 18.68
ANISOU 1511 CA  PRO 216 3104     2017     1976    12 -74 -420
ATOM   1512 CB  PRO 216 15.649   23.227   64.949  1.000 18.63
ANISOU 1512 CB  PRO 216 3592     1517     1971    -120 -421 9
ATOM   1513 CG  PRO 216 17.030   22.847   64.581  1.000 22.35
ANISOU 1513 CG  PRO 216 3401     2426     2666    -419 -427 -783
ATOM   1514 C   PRO 216 14.461   23.700   62.819  1.000 18.50
ANISOU 1514 C   PRO 216 2921     2083     2026    58 -465  -473
ATOM   1515 O   PRO 216 15.024   23.854   61.731  1.000 19.82
ANISOU 1515 O   PRO 216 2752     2453     2325    -32  -375 1 9
ATOM   1516 N   TYR 217 13.487   24.536   63.194  1.000 20.05
ANISOU 1516 N   TYR 217 3213     1981     2422    90 -482  -718
ATOM   1517 CA  TYR 217 13.178   25.662   62.308  1.000 22.97
ANISOU 1517 CA  TYR 217 2849     2652     3227    211  -1467 -313
ATOM   1518 C   TYR 217 14.347   26.647   62.283  1.000 23.92
ANISOU 1518 C   TYR 217 4139     2131     2819    -337 -1776 -165
ATOM   1519 O   TYR 217 15.149   26.726   63.213  1.000 30.46
ANISOU 1519 O   TYR 217 4321     3440     3812    -1118 -2477 7 28
ATOM   1520 CB  TYR 217 11.891   26.314   62.768  1.000 32.68
ANISOU 1520 CB  TYR 217 3958     3294     5164    1148 -874 -783
ATOM   1521 CG  TYR 217 12.064   27.462   63.718  1.000 44.77
ANISOU 1521 CG  TYR 217 6829     4326     5854    895  38 -1870
ATOM   1522 CD1 TYR 217 11.853   28.763   63.285  1.000 54.26
ANISOU 1522 CD1 TYR 217 10311    3688     6615    -323 132  -1945
ATOM   1523 CD2 TYR 217 12.428   27.243   65.043  1.000 57.77
ANISOU 1523 CD2 TYR 217 10635    5155     6158    -1027 -1446 -1931
ATOM   1524 CE1 TYR 217 12.011   29.816   64.174  1.000 60.33
ANISOU 1524 CE1 TYR 217 11807    4345     6772    -1101 -132 -2259
ATOM   1525 CE2 TYR 217 12.585   28.296   65.926  1.000 64.51
ANISOU 1525 CE2 TYR 217 12481    5199     6832    -1936 -1520 -2074
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ATOM    1526 CZ   TYR   217 12.378   29.586  65.481  1.000 64.11
ANISOU  1526 CZ   TYR   217 12047    5183    7129    -1460 -817 -2160
ATOM    1527 OH   TYR   217 12.536   30.639  66.358  1.000 63.69
ANISOU  1527 OH   TYR   217 11840    5206    7153    -1832 -1191 -2064
ATOM    1528 N    ARG   218 14.418   27.374  61.188  1.000 24.08
ANISOU  1528 N    ARG   218 4482     1611    3055    507   -1471 -145
ATOM    1529 CA   ARG   218 15.335   28.465  60.948  1.000 30.71
ANISOU  1529 CA   ARG   218 5932     2490    3245    -504  -1565 382
ATOM    1530 CB   ARG   218 16.326   28.135  59.840  1.000 35.08
ANISOU  1530 CB   ARG   218 5969     2797    4562    -1397 -779 -348
ATOM    1531 CG   ARG   218 17.401   27.114  60.073  1.000 35.77
ANISOU  1531 CG   ARG   218 6009     3087    4497    -1107 -733 -773
ATOM    1532 CD   ARG   218 18.658   27.775  60.626  1.000 34.46
ANISOU  1532 CD   ARG   218 5680     3264    4152    -1242 -244 -619
ATOM    1533 NE   ARG   218 19.223   28.746  59.709  1.000 29.51
ANISOU  1533 NE   ARG   218 4707     2579    3926    78 81 -629
ATOM    1534 CZ   ARG   218 20.218   28.620  58.830  1.000 33.18
ANISOU  1534 CZ   ARG   218 5269     3166    4170    60 452 -1075
ATOM    1535 NH1  ARG   218 20.839   27.452  58.709  1.000 27.44
ANISOU  1535 NH1  ARG   218 4202     2881    3341    -503 -373 -1585
ATOM    1536 NH2  ARG   218 20.583   29.675  58.077  1.000 22.96
ANISOU  1536 NH2  ARG   218 2327     3579    2817    233 -1117 -872
ATOM    1537 C    ARG   218 14.513   29.655  60.464  1.000 31.05
ANISOU  1537 C    ARG   218 7353     1949    2496    -448 -1823 197
ATOM    1538 O    ARG   218 14.114   29.533  59.295  1.000 40.40
ANISOU  1538 O    ARG   218 9873     2241    3235    531 -3168 -627
ATOM    1539 N    PRO   219 14.246   30.747  61.157  1.000 30.01
ANISOU  1539 N    PRO   219 6290     2559    2555    -499 -1839 -284
ATOM    1540 CD   PRO   219 14.597   31.043  62.543  1.000 36.79
ANISOU  1540 CD   PRO   219 8147     2878    2954    -1848 -2548 -374
ATOM    1541 CA   PRO   219 13.464   31.841  60.549  1.000 26.34
ANISOU  1541 CA   PRO   219 4421     2564    3025    -573 -988 -340
ATOM    1542 CB   PRO   219 13.523   32.993  61.563  1.000 32.44
ANISOU  1542 CB   PRO   219 5361     2891    4073    -691 -417 -989
ATOM    1543 CG   PRO   219 13.947   32.372  62.825  1.000 38.75
ANISOU  1543 CG   PRO   219 7916     3462    3344    -1981 -958 -1235
ATOM    1544 C    PRO   219 14.005   32.329  59.220  1.000 23.64
ANISOU  1544 C    PRO   219 3472     2066    3443    -161 -1028 109
ATOM    1545 O    PRO   219 13.300   32.950  58.412  1.000 30.61
ANISOU  1545 O    PRO   219 4358     2934    4339    -347 -1712 876
ATOM    1546 N    ASP   220 15.269   32.087  58.906  1.000 25.98
ANISOU  1546 N    ASP   220 3611     1756    4506    -389 -644 -815
ATOM    1547 CA   ASP   220 15.847   32.660  57.705  1.000 27.96
ANISOU  1547 CA   ASP   220 3951     1603    5071    -364 30 -824
ATOM    1548 CB   ASP   220 17.212   33.238  58.155  1.000 29.61
ANISOU  1548 CB   ASP   220 3549     3142    4558    -176 -326 176
ATOM    1549 CG   ASP   220 18.091   32.158  58.780  1.000 32.09
ANISOU  1549 CG   ASP   220 3706     3527    4961    625 978 615
ATOM    1550 OD1  ASP   220 17.697   31.434  59.719  1.000 26.12
ANISOU  1550 OD1  ASP   220 3013     3522    3390    -158 -289 -97
ATOM    1551 OD2  ASP   220 19.241   32.088  58.281  1.000 29.09
ANISOU  1551 OD2  ASP   220 3714     3756    3581    304 677 -712
ATOM    1552 C    ASP   220 16.037   31.726  56.525  1.000 25.26
ANISOU  1552 C    ASP   220 2508     1291    5800    354 1110 -822
ATOM    1553 O    ASP   220 16.641   32.095  55.515  1.000 28.28
ANISOU  1553 O    ASP   220 4088     1665    4994    -855 298 -434
ATOM    1554 N    ALA   221 15.500   30.510  56.631  1.000 21.58
ANISOU  1554 N    ALA   221 2748     1770    3681    -288 178 -651
ATOM    1555 CA   ALA   221 15.840   29.484  55.658  1.000 19.81
ANISOU  1555 CA   ALA   221 2986     1452    3090    -342 -224 -315
ATOM    1556 CB   ALA   221 17.130   28.800  56.109  1.000 19.51
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ANISOU 1556 CB  ALA 221 2267     1497     3647     -648   45 -746
ATOM   1557 C   ALA 221 14.718  28.469  55.489  1.000 17.71
ANISOU 1557 C   ALA 221 2304     1912     2512     -251  -75  -309
ATOM   1558 O   ALA 221 13.866  28.356  56.380  1.000 20.97
ANISOU 1558 O   ALA 221 3596     2029     2344     -503  406  -284
ATOM   1559 N   VAL 222 14.728  27.756  54.378  1.000 14.22
ANISOU 1559 N   VAL 222 1560     1582     2262     -76   -92   -11
ATOM   1560 CA  VAL 222 13.823  26.617  54.160  1.000 14.89
ANISOU 1560 CA  VAL 222 1326     1608     2723      98 -216  -205
ATOM   1561 CB  VAL 222 13.079  26.779  52.830  1.000 17.28
ANISOU 1561 CB  VAL 222 1680     1754     3133      90 -657  -144
ATOM   1562 CG1 VAL 222 13.995  26.685  51.620  1.000 19.17
ANISOU 1562 CG1 VAL 222 1974     2625     2686     -446 -775 150
ATOM   1563 CG2 VAL 222 11.996  25.747  52.641  1.000 17.36
ANISOU 1563 CG2 VAL 222 2185     1879     2533     -254 -362 -385
ATOM   1564 C   VAL 222 14.653  25.339  54.263  1.000 12.66
ANISOU 1564 C   VAL 222 1136     1564     2112     -50  -225 -378
ATOM   1565 O   VAL 222 15.828  25.320  53.893  1.000 13.12
ANISOU 1565 O   VAL 222 1280     1825     1881     104  -13  -199
ATOM   1566 N   LEU 223 14.049  24.267  54.775  1.000 12.98
ANISOU 1566 N   LEU 223 1123     1538     2270     -163 -370 -417
ATOM   1567 CA  LEU 223 14.681  22.952  54.749  1.000 10.70
ANISOU 1567 CA  LEU 223 891 1704     1472     -26   -98   -7
ATOM   1568 CB  LEU 223 14.276  22.130  55.961  1.000 13.02
ANISOU 1568 CB  LEU 223 1387     1968     1593     -419  289  -108
ATOM   1569 CG  LEU 223 14.739  20.683  56.106  1.000 17.41
ANISOU 1569 CG  LEU 223 2434     2132     2050     -290 -476 566
ATOM   1570 CD1 LEU 223 16.247  20.614  56.204  1.000 17.20
ANISOU 1570 CD1 LEU 223 2576     1518     2441      26 -989  -249
ATOM   1571 CD2 LEU 223 13.983  20.076  57.282  1.000 33.63
ANISOU 1571 CD2 LEU 223 3981     4721     4077     -341  134 2949
ATOM   1572 C   LEU 223 14.362  22.211  53.456  1.000 10.02
ANISOU 1572 C   LEU 223 1000     1265     1543      58 -319   8 8
ATOM   1573 O   LEU 223 13.206  22.160  53.088  1.000 12.86
ANISOU 1573 O   LEU 223 949 1945     1992     -97  -174  -372
ATOM   1574 N   VAL 224 15.406  21.675  52.798  1.000 10.55
ANISOU 1574 N   VAL 224 978 1070     1962     -76  -418  -382
ATOM   1575 CA  VAL 224 15.227  20.932  51.553  1.000 11.98
ANISOU 1575 CA  VAL 224 1376     1288     1887     -249 -278 -372
ATOM   1576 CB  VAL 224 16.095  21.461  50.391  1.000 11.23
ANISOU 1576 CB  VAL 224 901 1541     1824     -279 -622  -99
ATOM   1577 CG1 VAL 224 15.833  20.690  49.102  1.000 13.16
ANISOU 1577 CG1 VAL 224 1899     1485     1615     -462 -516 8 4
ATOM   1578 CG2 VAL 224 15.837  22.941  50.156  1.000 13.86
ANISOU 1578 CG2 VAL 224 1480     1520     2266     -135 -354 -64
ATOM   1579 C   VAL 224 15.539  19.450  51.786  1.000 10.87
ANISOU 1579 C   VAL 224 953 1275     1901     -13   342 -484
ATOM   1580 O   VAL 224 16.646  19.148  52.201  1.000 12.57
ANISOU 1580 O   VAL 224 1283     1363     2132     -175 -154 -274
ATOM   1581 N   PHE 225 14.585  18.553  51.533  1.000 11.86
ANISOU 1581 N   PHE 225 1241     1128     2137     -15  -303 -61
ATOM   1582 CA  PHE 225 14.811  17.130  51.412  1.000 11.38
ANISOU 1582 CA  PHE 225 1260     1157     1909     -22   -67  -56
ATOM   1583 CB  PHE 225 13.707  16.280  52.044  1.000 11.34
ANISOU 1583 CB  PHE 225 1117     1176     2015     205  -213 335
ATOM   1584 CG  PHE 225 13.654  16.172  53.544  1.000 11.38
ANISOU 1584 CG  PHE 225 964 1369     1991     -251 -333  181
ATOM   1585 CD1 PHE 225 14.685  15.653  54.291  1.000 15.28
ANISOU 1585 CD1 PHE 225 1771     1777     2256     -98  -853 298
ATOM   1586 CD2 PHE 225 12.532  16.576  54.254  1.000 17.91
ANISOU 1586 CD2 PHE 225 1904     2748     2153     341   106   0
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ATOM    1587 CE1 PHE   225 14.619  15.535  55.661  1.000 17.46
ANISOU  1587 CE1 PHE   225 2449    1862    2321    -249  -795 666
ATOM    1588 CE2 PHE   225 12.447  16.474  55.612  1.000 19.35
ANISOU  1588 CE2 PHE   225 2563    2678    2111    121    129  -11
ATOM    1589 CZ  PHE   225 13.499  15.945  56.341  1.000 18.20
ANISOU  1589 CZ  PHE   225 2952    1641    2324    -501  -470 3 6
ATOM    1590 C   PHE   225 14.907  16.774  49.927  1.000 12.03
ANISOU  1590 C   PHE   225 1480    1285    1804    130   -201 4 2
ATOM    1591 O   PHE   225 14.019  17.160  49.163  1.000 12.77
ANISOU  1591 O   PHE   225 1473    1466    1912    341   -118 3 8
ATOM    1592 N   CYS   226 15.940  16.032  49.521  1.000 9.62
ANISOU  1592 N   CYS   226 954 1403       1296    -204  -407 2 9
ATOM    1593 CA  CYS   226 15.917  15.400  48.197  1.000 10.80
ANISOU  1593 CA  CYS   226 1432    1204    1468    -258  -310 -59
ATOM    1594 CB  CYS   226 17.337  15.029  47.744  1.000 12.02
ANISOU  1594 CB  CYS   226 1539    1362    1666    -357  16 -125
ATOM    1595 SG  CYS   226 18.426  16.490  47.554  1.000 13.74
ANISOU  1595 SG  CYS   226 1627    1400    2192    -341  18 139
ATOM    1596 C   CYS   226 14.998  14.178  48.256  1.000 9.86
ANISOU  1596 C   CYS   226 1190    1061    1495    -20   -293 -16
ATOM    1597 O   CYS   226 15.015  13.431  49.252  1.000 11.17
ANISOU  1597 O   CYS   226 1181    1280    1781    -129  -435 272
ATOM    1598 N   GLY   227 14.217  13.963  47.205  1.000 10.17
ANISOU  1598 N   GLY   227 1428    1010    1427    -258  -271 -35
ATOM    1599 CA  GLY   227 13.370  12.806  47.053  1.000 9.73
ANISOU  1599 CA  GLY   227 1231    860 1604    -178  -74 -37
ATOM    1600 C   GLY   227 13.908  11.769  46.074  1.000 9.48
ANISOU  1600 C   GLY   227 1438    717 1445    16    -35  169
ATOM    1601 O   GLY   227 14.935  11.961  45.402  1.000 9.86
ANISOU  1601 O   GLY   227 1321    1137    1290    -104  -179 7 8
ATOM    1602 N   ALA   228 13.217  10.631  45.971  1.000 9.17
ANISOU  1602 N   ALA   228 1279    729 1477    109   -135 5 8
ATOM    1603 CA  ALA   228 13.650  9.529   45.108  1.000 9.41
ANISOU  1603 CA  ALA   228 1315    887 1371    9     -74  -52
ATOM    1604 CB  ALA   228 12.727  8.296   45.256  1.000 10.50
ANISOU  1604 CB  ALA   228 2011    824 1155    -143  124 101
ATOM    1605 C   ALA   228 13.712  9.918   43.637  1.000 9.25
ANISOU  1605 C   ALA   228 1343    666 1507    -108  90 139
ATOM    1606 O   ALA   228 14.493  9.305   42.895  1.000 9.48
ANISOU  1606 O   ALA   228 1171    1026    1405    -88   -50  9 0
ATOM    1607 N   ILE   229 12.970  10.907  43.143  1.000 10.30
ANISOU  1607 N   ILE   229 1402    1004    1509    18 25 177
ATOM    1608 CA  ILE   229 13.074  11.311  41.727  1.000 10.87
ANISOU  1608 CA  ILE   229 1197    1446    1487    -2 -159 2 51
ATOM    1609 CB  ILE   229 11.802  12.078  41.295  1.000 11.52
ANISOU  1609 CB  ILE   229 1257    1473    1647    34 -57 3 62
ATOM    1610 CG2 ILE   229 11.997  12.852  39.999  1.000 11.30
ANISOU  1610 CG2 ILE   229 1655    1211    1426    83 -189  156
ATOM    1611 CG1 ILE   229 10.575  11.131  41.237  1.000 14.39
ANISOU  1611 CG1 ILE   229 1031    2034    2402    -40   210  3 11
ATOM    1612 CD1 ILE   229 10.676  10.093  40.138  1.000 19.20
ANISOU  1612 CD1 ILE   229 2085    1723    3489    -610  93 -138
ATOM    1613 C   ILE   229 14.389  12.034  41.477  1.000 10.38
ANISOU  1613 C   ILE   229 1293    1405    1247    -62   -169 3 22
ATOM    1614 O   ILE   229 14.952  11.947  40.369  1.000 11.66
ANISOU  1614 O   ILE   229 1805    1257    1368    -13   145  3 28
ATOM    1615 N   ALA   230 14.965  12.692  42.490  1.000 10.66
ANISOU  1615 N   ALA   230 1476    1274    1300    -104  -151 356
ATOM    1616 CA  ALA   230 16.312  13.259  42.338  1.000 11.21
ANISOU  1616 CA  ALA   230 1473    975 1813    -57   -308  9 0
ATOM    1617 CB  ALA   230 16.681  14.148  43.509  1.000 10.58
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ANISOU 1617 CB  ALA  230 1350     1295    1375    62 -106  1 2 6
ATOM   1618 C   ALA  230 17.336  12.136  42.132  1.000 11.28
ANISOU 1618 C   ALA  230 1640    1037    1610     1  55 2 4 2
ATOM   1619 O   ALA  230 18.220  12.185  41.273  1.000 11.29
ANISOU 1619 O   ALA  230 1510    1240    1539  -189  -40  2 8 8
ATOM   1620 N   THR  231 17.173  11.097  42.946  1.000 10.55
ANISOU 1620 N   THR  231 1328     894    1787  -262  -70 2 1 4
ATOM   1621 CA  THR  231 18.064   9.939  42.819  1.000 11.98
ANISOU 1621 CA  THR  231 1929    1018    1605     0 -164  1 5 9
ATOM   1622 CB  THR  231 17.717   8.865  43.878  1.000 10.76
ANISOU 1622 CB  THR  231 1381    1070    1636   -86  -453 2 4 6
ATOM   1623 OG1 THR  231 17.658   9.437  45.198  1.000 11.82
ANISOU 1623 OG1 THR  231 1615    1236    1641    35 -115  2 7 7
ATOM   1624 CG2 THR  231 18.765   7.752  43.880  1.000 12.57
ANISOU 1624 CG2 THR  231 1621    1314    1840   160  -89  3 5 1
ATOM   1625 C   THR  231 17.958   9.352  41.415  1.000 12.52
ANISOU 1625 C   THR  231 1632    1500    1624  -145  42 1 1
ATOM   1626 O   THR  231 18.939   9.050  40.732  1.000 12.15
ANISOU 1626 O   THR  231 1636    1233    1747   -17   86 2 2 4
ATOM   1627 N   LEU  232 16.717   9.154  40.959  1.000 11.14
ANISOU 1627 N   LEU  232 1608    1005    1620    90 -68 1 4 1
ATOM   1628 CA  LEU  232 16.446   8.522  39.675  1.000 12.47
ANISOU 1628 CA  LEU  232 1880    1203    1657   109  -169 4 5
ATOM   1629 CB  LEU  232 14.950   8.214  39.552  1.000 12.81
ANISOU 1629 CB  LEU  232 1989    1225    1654   -78  -209 1 9
ATOM   1630 CG  LEU  232 14.452   7.464  38.314  1.000 14.85
ANISOU 1630 CG  LEU  232 2171    1753    1719    -5 -410  - 9 6
ATOM   1631 CD1 LEU  232 15.020   6.055  38.240  1.000 16.78
ANISOU 1631 CD1 LEU  232 2693    1749    1932    72 -431  - 4 8 7
ATOM   1632 CD2 LEU  232 12.914   7.411  38.291  1.000 15.70
ANISOU 1632 CD2 LEU  232 2180    1866    1920  -278  -589 4 9 4
ATOM   1633 C   LEU  232 16.964   9.354  38.511  1.000 11.58
ANISOU 1633 C   LEU  232 1452    1390    1559   309  -301 1 3 6
ATOM   1634 O   LEU  232 17.752   8.837  37.686  1.000 13.45
ANISOU 1634 O   LEU  232 1808    1436    1867   320  -17  3 0
ATOM   1635 N   VAL  233 16.565  10.617  38.414  1.000 10.95
ANISOU 1635 N   VAL  233 1428    1210    1522   -14  -210 0
ATOM   1636 CA  VAL  233 16.948  11.421  37.242  1.000 11.70
ANISOU 1636 CA  VAL  233 1703    1345    1397    97 5  1 3
ATOM   1637 CB  VAL  233 16.156  12.743  37.215  1.000 11.14
ANISOU 1637 CB  VAL  233 1672    1272    1287   -26   276  7 3
ATOM   1638 CG1 VAL  233 16.661  13.774  38.249  1.000 13.34
ANISOU 1638 CG1 VAL  233 1834    1562    1673  -205   653  - 3 6 8
ATOM   1639 CG2 VAL  233 16.106  13.412  35.827  1.000 14.66
ANISOU 1639 CG2 VAL  233 1992    1873    1704    -4 -45 5 8 6
ATOM   1640 C   VAL  233 18.459  11.586  37.132  1.000 13.41
ANISOU 1640 C   VAL  233 1712    1573    1811    91 151  1 2 5
ATOM   1641 O   VAL  233 19.012  11.627  36.021  1.000 13.45
ANISOU 1641 O   VAL  233 1844    1402    1866    46 192 4 3 8
ATOM   1642 N   THR  234 19.188  11.665  38.250  1.000 13.13
ANISOU 1642 N   THR  234 1457    1639    1893  -139   223  1 2 6
ATOM   1643 CA  THR  234 20.613  11.930  38.244  1.000 13.00
ANISOU 1643 CA  THR  234 1483    1600    1855  -188   428  1 4 3
ATOM   1644 CB  THR  234 21.069  12.726  39.465  1.000 12.46
ANISOU 1644 CB  THR  234 1300    1632    1803   -32   200 2 5 1
ATOM   1645 OG1 THR  234 20.825  11.941  40.639  1.000 13.71
ANISOU 1645 OG1 THR  234 1660    1662    1888   192   202  2 9 1
ATOM   1646 CG2 THR  234 20.301  14.027  39.643  1.000 11.37
ANISOU 1646 CG2 THR  234 1097    1565    1657  -153  -87  1 6 9
ATOM   1647 C   THR  234 21.424  10.643  38.178  1.000 14.44
ANISOU 1647 C   THR  234 1550    1823    2114     6  -73 - 5 3
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ATOM    1648 O    THR  234 22.659  10.710  38.233 1.000 15.81
ANISOU  1648 O    THR  234 1546    2169    2293    61  27 217
ATOM    1649 N    GLY  235 20.767   9.477  38.070 1.000 14.76
ANISOU  1649 N    GLY  235 1776    1576    2254    77  81 410
ATOM    1650 CA   GLY  235 21.530   8.249  37.994 1.000 16.69
ANISOU  1650 CA   GLY  235 2053    1803    2486   304  35 189
ATOM    1651 C    GLY  235 22.243   7.862  39.275 1.000 16.83
ANISOU  1651 C    GLY  235 1854    2031    2512   765 244 193
ATOM    1652 O    GLY  235 23.305   7.237  39.194 1.000 19.67
ANISOU  1652 O    GLY  235 2074    2172    3225  1035 383 372
ATOM    1653 N    GLY  236 21.665   8.227  40.425 1.000 14.46
ANISOU  1653 N    GLY  236 1732    1327    2433   154 198  7 5
ATOM    1654 CA   GLY  236 22.187   7.768  41.692 1.000 15.73
ANISOU  1654 CA   GLY  236 2060    1381    2536    41 186 312
ATOM    1655 C    GLY  236 23.166   8.691  42.388 1.000 14.76
ANISOU  1655 C    GLY  236 1931    1332    2346   252  73 288
ATOM    1656 O    GLY  236 23.778   8.244  43.373 1.000 18.32
ANISOU  1656 O    GLY  236 1983    2197    2782   106 -105 844
ATOM    1657 N    GLN  237 23.318   9.938  41.953 1.000 13.99
ANISOU  1657 N    GLN  237 1831    1349    2137   158 165  1 7 0
ATOM    1658 CA   GLN  237 24.209  10.956  42.485 1.000 13.13
ANISOU  1658 CA   GLN  237 1474    1304    2210   367 -31  2 7 6
ATOM    1659 CB   GLN  237 24.629  11.948  41.383 1.000 13.38
ANISOU  1659 CB   GLN  237 1367    1566    2151    99  72 159
ATOM    1660 CG   GLN  237 25.390  11.335  40.219 1.000 14.74
ANISOU  1660 CG   GLN  237 1404    1529    2666   518 410 333
ATOM    1661 CD   GLN  237 25.816  12.428  39.257 1.000 17.22
ANISOU  1661 CD   GLN  237 2039    2018    2486   -64 426 360
ATOM    1662 OE1  GLN  237 26.754  13.208  39.522 1.000 20.60
ANISOU  1662 OE1  GLN  237 1566    2334    3928   -10 -29 965
ATOM    1663 NE2  GLN  237 25.116  12.470  38.127 1.000 17.47
ANISOU  1663 NE2  GLN  237 2014    2093    2533   208 438  4 0 8
ATOM    1664 C    GLN  237 23.627  11.739  43.663 1.000 12.90
ANISOU  1664 C    GLN  237 1474    1324    2104    72 -10 255
ATOM    1665 O    GLN  237 24.332  12.549  44.282 1.000 15.90
ANISOU  1665 O    GLN  237 1739    1888    2413  -291  74 - 8 4
ATOM    1666 N    VAL  238 22.365  11.481  44.013 1.000 12.13
ANISOU  1666 N    VAL  238 1372     962    2276   212  -33 200
ATOM    1667 CA   VAL  238 21.664  12.182  45.082 1.000 11.91
ANISOU  1667 CA   VAL  238 1169    1436    1920  -121 -276 - 1 9
ATOM    1668 CB   VAL  238 20.622  13.158  44.510 1.000 12.00
ANISOU  1668 CB   VAL  238 1024    1179    2357    -6 199 - 3 1
ATOM    1669 CG1  VAL  238 19.978  13.999  45.601 1.000 13.07
ANISOU  1669 CG1  VAL  238 1530    1668    1767    63 -232 - 2 2 2
ATOM    1670 CG2  VAL  238 21.207  14.088  43.463 1.000 14.00
ANISOU  1670 CG2  VAL  238 1795    1470    2053   -40  -2 1 81
ATOM    1671 C    VAL  238 20.990  11.156  46.000 1.000 13.62
ANISOU  1671 C    VAL  238 1707    1415    2054  -103 -40 - 2 2
ATOM    1672 O    VAL  238 20.252  10.288  45.492 1.000 12.64
ANISOU  1672 O    VAL  238 1702     977    2123    60 -318 257
ATOM    1673 N    LYS  239 21.247  11.246  47.300 1.000 11.99
ANISOU  1673 N    LYS  239 1075    1404    2076   127 -101 7 4
ATOM    1674 CA   LYS  239 20.568  10.444  48.322 1.000 12.77
ANISOU  1674 CA   LYS  239 1224    1541    2088   -12 -124 8 6
ATOM    1675 CB   LYS  239 21.382  10.463  49.622 1.000 12.23
ANISOU  1675 CB   LYS  239 1333    1155    2158   183 -234 - 2 8
ATOM    1676 CG   LYS  239 20.953   9.626  50.793 1.000 13.85
ANISOU  1676 CG   LYS  239 1643    1689    1931   187 -52  - 8 9
ATOM    1677 CD   LYS  239 21.927   9.579  51.957 1.000 20.13
ANISOU  1677 CD   LYS  239 2893    1795    2961    10 -1185 588
ATOM    1678 CE   LYS  239 21.364   8.745  53.098 1.000 24.73
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ANISOU 1678 CE  LYS  239 4065    2250    3080    -348  -1466 1064
ATOM   1679 NZ  LYS  239 22.019  8.841   54.420  1.000 32.28
ANISOU 1679 NZ  LYS  239 5658    4315    2293    1610  -930 -304
ATOM   1680 C   LYS  239 19.169  10.949  48.661  1.000 11.59
ANISOU 1680 C   LYS  239 1207    1332    1866    -35   -82  6 4
ATOM   1681 O   LYS  239 18.976  12.191  48.708  1.000 12.32
ANISOU 1681 O   LYS  239 1638    1294    1749    -2 -25 236
ATOM   1682 N   ALA  240 18.222  10.047  48.863  1.000 10.65
ANISOU 1682 N   ALA  240 1248    1266    1534    -52  -185 -88
ATOM   1683 CA  ALA  240 16.884  10.368  49.354  1.000 10.21
ANISOU 1683 CA  ALA  240 1292    1057    1531    -195  -37 -109
ATOM   1684 CB  ALA  240 15.784  9.782   48.466  1.000 13.46
ANISOU 1684 CB  ALA  240 1195    2378    1543    -232  20 -403
ATOM   1685 C   ALA  240 16.784  9.881   50.807  1.000 10.97
ANISOU 1685 C   ALA  240 1308    1249    1611    -127  -142 4 9
ATOM   1686 O   ALA  240 16.595  8.664   51.059  1.000 13.02
ANISOU 1686 O   ALA  240 2136    1242    1568    -243  28 - 7
ATOM   1687 N   PRO  241 16.967  10.783  51.782  1.000 11.13
ANISOU 1687 N   PRO  241 1723    1041    1466    160   -49  138
ATOM   1688 CD  PRO  241 17.172  12.237  51.654  1.000 11.17
ANISOU 1688 CD  PRO  241 1419    1204    1618    -180  -128 7 6
ATOM   1689 CA  PRO  241 17.043  10.340  53.166  1.000 11.96
ANISOU 1689 CA  PRO  241 1597    1447    1499    -172  -32  193
ATOM   1690 CB  PRO  241 17.712  11.545  53.891  1.000 14.25
ANISOU 1690 CB  PRO  241 1875    1837    1701    -531  -383 242
ATOM   1691 CG  PRO  241 17.286  12.724  53.069  1.000 13.61
ANISOU 1691 CG  PRO  241 2015    1446    1709    -596  -465 -22
ATOM   1692 C   PRO  241 15.708  10.072  53.861  1.000 12.35
ANISOU 1692 C   PRO  241 1417    1610    1665    -175  -187 418
ATOM   1693 O   PRO  241 14.759  10.829  53.655  1.000 12.28
ANISOU 1693 O   PRO  241 1359    1582    1723    -232  -468 8 1
ATOM   1694 N   ARG  242 15.700  9.033   54.711  1.000 12.75
ANISOU 1694 N   ARG  242 1775    1407    1664    -170  76 250
ATOM   1695 CA  ARG  242 14.563  8.804   55.576  1.000 10.76
ANISOU 1695 CA  ARG  242 1292    1417    1380    -207  -281 211
ATOM   1696 CB  ARG  242 14.614  7.405   56.223  1.000 15.02
ANISOU 1696 CB  ARG  242 2419    1368    1918    -357  117  2 9 4
ATOM   1697 CG  ARG  242 14.115  6.342   55.230  1.000 17.85
ANISOU 1697 CG  ARG  242 3373    1274    2135    9  -560  251
ATOM   1698 CD  ARG  242 14.254  4.934   55.763  1.000 19.42
ANISOU 1698 CD  ARG  242 3148    1111    3120    506   503  116
ATOM   1699 NE  ARG  242 15.667  4.552   55.849  1.000 20.71
ANISOU 1699 NE  ARG  242 3225    2107    2538    938   638  2 12
ATOM   1700 CZ  ARG  242 16.107  3.444   56.416  1.000 23.22
ANISOU 1700 CZ  ARG  242 3198    2206    3417    307   -544 589
ATOM   1701 NH1 ARG  242 15.285  2.567   56.980  1.000 24.46
ANISOU 1701 NH1 ARG  242 4097    2112    3083    307   387  195
ATOM   1702 NH2 ARG  242 17.416  3.184   56.438  1.000 25.41
ANISOU 1702 NH2 ARG  242 3402    2332    3921    819   -267 403
ATOM   1703 C   ARG  242 14.477  9.834   56.704  1.000 11.95
ANISOU 1703 C   ARG  242 1571    1463    1506    -248  -214 107
ATOM   1704 O   ARG  242 15.469  10.377  57.213  1.000 13.65
ANISOU 1704 O   ARG  242 1708    1439    2040    -322  -401 -38
ATOM   1705 N   HIS  243 13.252  10.085  57.118  1.000 11.60
ANISOU 1705 N   HIS  243 1657    1410    1342    -311  -206 5
ATOM   1706 CA  HIS  243 12.942  11.056  58.158  1.000 11.49
ANISOU 1706 CA  HIS  243 1855    1571    938  -306  -183  140
ATOM   1707 CB  HIS  243 12.968  12.462  57.546  1.000 11.22
ANISOU 1707 CB  HIS  243 1432    1379    1453    -231  -221 3 9
ATOM   1708 CG  HIS  243 12.133  12.694  56.341  1.000 11.80
ANISOU 1708 CG  HIS  243 1937    1171    1378    -31   -268 7 9
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ATOM    1709 CD2 HIS  243 10.885  13.236 56.181 1.000 11.15
ANISOU  1709 CD2 HIS  243 1990    1106   1142   35 -344  1 4 1
ATOM    1710 ND1 HIS  243 12.538  12.345 55.086 1.000 12.29
ANISOU  1710 ND1 HIS  243 1670    1606   1395   -394 -91  8
ATOM    1711 CE1 HIS  243 11.599  12.653 54.209 1.000 12.59
ANISOU  1711 CE1 HIS  243 1686    1740   1357   -522 -202 -2 5 3
ATOM    1712 NE2 HIS  243 10.585  13.204 54.841 1.000 10.77
ANISOU  1712 NE2 HIS  243 1612    1307   1172   -616 -268 -3 6
ATOM    1713 C   HIS  243 11.605  10.737 58.812 1.000 12.49
ANISOU  1713 C   HIS  243 1869    1570   1308   -321 -53  7 3
ATOM    1714 O   HIS  243 10.807  9.949  58.271 1.000 12.26
ANISOU  1714 O   HIS  243 1756    1404   1497   -188 -115 4 7
ATOM    1715 N   HIS  244 11.352  11.319 59.983 1.000 12.16
ANISOU  1715 N   HIS  244 1464    1715   1442   -230 -112 -3 2
ATOM    1716 CA  HIS  244 10.138  11.043 60.758 1.000 12.02
ANISOU  1716 CA  HIS  244 1606    1809   1152   -599 -167 -2 4
ATOM    1717 CB  HIS  244 10.255  9.778  61.615 1.000 12.51
ANISOU  1717 CB  HIS  244 1655    1763   1334   -19  101  -4 7
ATOM    1718 CG  HIS  244 11.270  9.810  62.698 1.000 15.04
ANISOU  1718 CG  HIS  244 2025    1723   1965   -178 -433 1 5 4
ATOM    1719 CD2 HIS  244 11.276  10.380 63.923 1.000 18.19
ANISOU  1719 CD2 HIS  244 2946    2339   1627   36 -732  2 9 7
ATOM    1720 ND1 HIS  244 12.504  9.203  62.662 1.000 19.30
ANISOU  1720 ND1 HIS  244 2303    2232   2800   229  -708 2 6 6
ATOM    1721 CE1 HIS  244 13.226  9.387  63.731 1.000 22.48
ANISOU  1721 CE1 HIS  244 2649    2734   3159   11 -1206 6 5 0
ATOM    1722 NE2 HIS  244 12.476  10.120 64.531 1.000 22.33
ANISOU  1722 NE2 HIS  244 3088    2895   2500   -272 -1236 3 8 4
ATOM    1723 C   HIS  244 9.780   12.246 61.613 1.000 13.47
ANISOU  1723 C   HIS  244 1897    1673   1549   -362 254  6 7
ATOM    1724 O   HIS  244 10.603  13.165 61.798 1.000 13.48
ANISOU  1724 O   HIS  244 1800    1726   1595   -283 139  -1 6 1
ATOM    1725 N   VAL  245 8.551   12.245 62.130 1.000 15.26
ANISOU  1725 N   VAL  245 1852    1964   1983   -417 232  -5 5
ATOM    1726 CA  VAL  245 8.090   13.352 62.970 1.000 17.31
ANISOU  1726 CA  VAL  245 2108    2442   2026   -125 476  -1 6 1
ATOM    1727 CB  VAL  245 6.939   14.169 62.360 1.000 17.33
ANISOU  1727 CB  VAL  245 2094    2473   2019   -80  340  -4 7 7
ATOM    1728 CG1 VAL  245 6.551   15.334 63.286 1.000 25.25
ANISOU  1728 CG1 VAL  245 2217    2966   4410   -137 1939 -1 2 4 8
ATOM    1729 CG2 VAL  245 7.252   14.713 60.966 1.000 21.49
ANISOU  1729 CG2 VAL  245 3070    2538   2556   -180 313  2 7 1
ATOM    1730 C   VAL  245 7.682   12.768 64.327 1.000 18.29
ANISOU  1730 C   VAL  245 2123    2689   2137   -443 508  -7 1
ATOM    1731 O   VAL  245 6.765   11.945 64.429 1.000 18.62
ANISOU  1731 O   VAL  245 1810    2174   3089   -15  451  2 5 4
ATOM    1732 N   ALA  246 8.385   13.202 65.369 1.000 21.54
ANISOU  1732 N   ALA  246 2813    3045   2327   -591 -407 9 0 7
ATOM    1733 CA  ALA  246 8.133   12.701 66.719 1.000 25.10
ANISOU  1733 CA  ALA  246 4596    2562   2379   94 -225  9 9 7
ATOM    1734 CB  ALA  246 9.424   12.723 67.537 1.000 29.82
ANISOU  1734 CB  ALA  246 5381    3408   2540   402  -889 1 3 2 5
ATOM    1735 C   ALA  246 7.080   13.545 67.412 1.000 31.20
ANISOU  1735 C   ALA  246 5079    4143   2632   314  280  4 2 8
ATOM    1736 O   ALA  246 6.876   14.714 67.052 1.000 32.39
ANISOU  1736 O   ALA  246 4706    3748   3853   567  1247 -6 6
ATOM    1737 N   ALA  247 6.429   12.973 68.413 1.000 37.30
ANISOU  1737 N   ALA  247 5548    5498   3126   92 640  8 3 5
ATOM    1738 CA  ALA  247 5.585   13.794 69.271 1.000 40.42
ANISOU  1738 CA  ALA  247 5434    6048   3878   15 1313  8 5 0
ATOM    1739 C   ALA  247 6.289   14.132 70.578 1.000 42.17
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ANISOU 1739 C    ALA   247 6495      5891     3636     -823  1720 341
ATOM   1740 O    ALA   247 7.048    13.338   71.136   1.000 41.63
ANISOU 1740 O    ALA   247 5811      6371     3637    -1631  804   425
ATOM   1741 CB   ALA   247 4.280    13.067   69.525   1.000 47.17
ANISOU 1741 CB   ALA   247 5186      9059     3676     -520  523  2683
ATOM   1742 N    SER   257 1.781    21.848   70.382   1.000 31.02
ANISOU 1742 N    SER   257 4109      5558     2119      137  -235 -810
ATOM   1743 CA   SER   257 1.214    21.932   69.052   1.000 27.01
ANISOU 1743 CA   SER   257 2792      5165     2304      109  -143 -707
ATOM   1744 CB   SER   257 0.039    22.914   68.992   1.000 28.16
ANISOU 1744 CB   SER   257 2655      4473     3572     -238   -90 -1071
ATOM   1745 OG   SER   257 0.491    24.251   69.074   1.000 51.32
ANISOU 1745 OG   SER   257 8516      4131     6853     -616 -2734 -807
ATOM   1746 C    SER   257 2.259    22.389   68.034   1.000 26.19
ANISOU 1746 C    SER   257 2537      5064     2350     -132  -413 -527
ATOM   1747 O    SER   257 3.286    22.938   68.352   1.000 31.47
ANISOU 1747 O    SER   257 2740      5886     3330     -435  -689 -639
ATOM   1748 N    ARG   258 2.022    22.123   66.763   1.000 26.04
ANISOU 1748 N    ARG   258 3257      4477     2161     -238  -441 -19
ATOM   1749 CA   ARG   258 2.982    22.541   65.747   1.000 25.81
ANISOU 1749 CA   ARG   258 2606      4735     2466       73  -338 -197
ATOM   1750 C    ARG   258 2.321    22.609   64.383   1.000 18.26
ANISOU 1750 C    ARG   258 2374      2541     2021       39   83 -854
ATOM   1751 O    ARG   258 1.288    21.967   64.131   1.000 19.23
ANISOU 1751 O    ARG   258 2600      2819     1888     -389  311 -420
ATOM   1752 CB   ARG   258 4.188    21.592   65.664   1.000 29.78
ANISOU 1752 CB   ARG   258 3403      5052     2861      695  -552 -57
ATOM   1753 CG   ARG   258 4.246    20.784   64.384   1.000 32.64
ANISOU 1753 CG   ARG   258 4358      4148     3896      146   97 -561
ATOM   1754 CD   ARG   258 5.325    19.746   64.499   1.000 30.38
ANISOU 1754 CD   ARG   258 3812      4423     3309      -57  341 -16
ATOM   1755 NE   ARG   258 6.433    19.909   63.581   1.000 29.43
ANISOU 1755 NE   ARG   258 3990      4604     2588      -22   70 542
ATOM   1756 CZ   ARG   258 6.453    19.389   62.359   1.000 25.02
ANISOU 1756 CZ   ARG   258 2540      3893     3074      304  -243 104
ATOM   1757 NH1  ARG   258 5.456    18.677   61.835   1.000 22.88
ANISOU 1757 NH1  ARG   258 2105      2607     3982      359  315 289
ATOM   1758 NH2  ARG   258 7.523    19.593   61.617   1.000 22.03
ANISOU 1758 NH2  ARG   258 2477      2775     3120     -430  -287 -964
ATOM   1759 N    THR   259 2.927    23.415   63.527   1.000 20.17
ANISOU 1759 N    THR   259 2010      3640     2013     -743   91 -1001
ATOM   1760 CA   THR   259 2.485    23.505   62.138   1.000 18.33
ANISOU 1760 CA   THR   259 1801      3043     2121     -533   43 -685
ATOM   1761 CB   THR   259 1.821    24.821   61.713   1.000 23.23
ANISOU 1761 CB   THR   259 2082      3169     3576     -384  -164 -580
ATOM   1762 OG1  THR   259 2.839    25.830   61.681   1.000 34.27
ANISOU 1762 OG1  THR   259 2181      2562     8277     -137  -996 -794
ATOM   1763 CG2  THR   259 0.738    25.198   62.704   1.000 25.49
ANISOU 1763 CG2  THR   259 4466      2233     2987      325  396 -948
ATOM   1764 C    THR   259 3.702    23.352   61.222   1.000 18.44
ANISOU 1764 C    THR   259 2035      2822     2150     -753  274 -583
ATOM   1765 O    THR   259 4.835    23.698   61.603   1.000 24.74
ANISOU 1765 O    THR   259 1961      5370     2069     -964  231 -714
ATOM   1766 N    SER   260 3.420    22.867   60.026   1.000 16.29
ANISOU 1766 N    SER   260 1971      2352     1864     -224    2 -75
ATOM   1767 CA   SER   260 4.447    22.832   58.989   1.000 17.43
ANISOU 1767 CA   SER   260 1783      2961     1879      321  -95 -72
ATOM   1768 CB   SER   260 5.224    21.514   58.956   1.000 20.17
ANISOU 1768 CB   SER   260 2306      3257     2100      762  -127 388
ATOM   1769 OG   SER   260 4.416    20.392   58.698   1.000 27.09
ANISOU 1769 OG   SER   260 3651      2803     3839      426  217 554
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ATOM    1770 C    SER 260 3.832   23.062 57.614 1.000 14.52
ANISOU  1770 C    SER 260 1463    2165   1889   83 -100  - 1
ATOM    1771 O    SER 260 2.686   22.681 57.402 1.000 15.92
ANISOU  1771 O    SER 260 1513    2489   2049  -93  -1 2 5 7
ATOM    1772 N    SER 261 4.617   23.660 56.742 1.000 13.45
ANISOU  1772 N    SER 261 1489    1832   1788 -190 -120 - 5 0 0
ATOM    1773 CA   SER 261 4.294   23.864 55.334 1.000 13.52
ANISOU  1773 CA   SER 261 1599    1726   1812 -204  30 - 3 1 5
ATOM    1774 C    SER 261 5.209   22.943 54.545 1.000 12.45
ANISOU  1774 C    SER 261 1332    1887   1513  -42 -240 - 1 6 1
ATOM    1775 O    SER 261 6.438   23.072 54.662 1.000 15.07
ANISOU  1775 O    SER 261 1344    1885   2497  -68 -331 - 3 4 3
ATOM    1776 CB   SER 261 4.446   25.330 54.943 1.000 17.76
ANISOU  1776 CB   SER 261 2718    1625   2404 -399 -485 - 3 1 8
ATOM    1777 OG   SER 261 4.428   25.554 53.570 1.000 27.54
ANISOU  1777 OG   SER 261 4342    3308   2814 -719 -821 9 5 5
ATOM    1778 N    VAL 262 4.623   22.045 53.782 1.000 10.90
ANISOU  1778 N    VAL 262 1215    1630   1299   41 -135  1 9
ATOM    1779 CA   VAL 262 5.393   21.031 53.026 1.000 11.61
ANISOU  1779 CA   VAL 262 1334    1634   1442  156 -103 1 7
ATOM    1780 CB   VAL 262 5.026   19.639 53.558 1.000 11.87
ANISOU  1780 CB   VAL 262 1262    1636   1614    9 -187  - 7 4
ATOM    1781 CG1  VAL 262 5.778   18.577 52.779 1.000 13.12
ANISOU  1781 CG1  VAL 262 1462    1527   1997  -2 185 5 1
ATOM    1782 CG2  VAL 262 5.262   19.564 55.062 1.000 17.08
ANISOU  1782 CG2  VAL 262 3390    1494   1604 -374 -245 3 9
ATOM    1783 C    VAL 262 5.096   21.149 51.543 1.000 11.18
ANISOU  1783 C    VAL 262 1026    1790   1431    1 -111  -1 3 8
ATOM    1784 O    VAL 262 3.939   20.969 51.127 1.000 12.76
ANISOU  1784 O    VAL 262 1064    2137   1648 -251  -84 - 2 7 1
ATOM    1785 N    PHE 263 6.090   21.438 50.714 1.000 9.50
ANISOU  1785 N    PHE 263 995 1297    1316   -6 -210 - 1 8 1
ATOM    1786 CA   PHE 263 5.933   21.637 49.288 1.000 9.61
ANISOU  1786 CA   PHE 263 1310    1017   1324  -6 -284  - 4 2
ATOM    1787 CB   PHE 263 6.486   23.002 48.848 1.000 10.94
ANISOU  1787 CB   PHE 263 1282    1055   1821  -50  -253 4
ATOM    1788 CG   PHE 263 6.150   23.399 47.418 1.000 10.35
ANISOU  1788 CG   PHE 263 779 1231    1921   -58   32 3 4 0
ATOM    1789 CD1  PHE 263 6.858   22.915 46.326 1.000 9.98
ANISOU  1789 CD1  PHE 263 766 1183    1841   -26  -101  2 4 0
ATOM    1790 CD2  PHE 263 5.106   24.277 47.148 1.000 11.95
ANISOU  1790 CD2  PHE 263 1229    1261   2052  245   -29  2 6 1
ATOM    1791 CE1  PHE 263 6.530   23.229 45.019 1.000 12.49
ANISOU  1791 CE1  PHE 263 1718    1173   1857   31 -370  1 3 6
ATOM    1792 CE2  PHE 263 4.769   24.601 45.836 1.000 13.12
ANISOU  1792 CE2  PHE 263 1451    1382   2151   43 -292  3 5 3
ATOM    1793 CZ   PHE 263 5.491   24.112 44.762 1.000 12.42
ANISOU  1793 CZ   PHE 263 1318    1453   1948 -138 -187 6 4 9
ATOM    1794 C    PHE 263 6.636   20.505 48.530 1.000 8.91
ANISOU  1794 C    PHE 263 1076    1085   1223  -39  -142 2  4
ATOM    1795 O    PHE 263 7.868   20.406 48.538 1.000 10.98
ANISOU  1795 O    PHE 263 1098    1233   1842 -120 -224 - 1 4 5
ATOM    1796 N    PHE 264 5.856   19.691 47.812 1.000 9.19
ANISOU  1796 N    PHE 264 1089    1266   1136  -86  -105 - 8 2
ATOM    1797 CA   PHE 264 6.386   18.602 46.991 1.000 9.64
ANISOU  1797 CA   PHE 264 1009    1238   1417  -56  -60  - 1 2 6
ATOM    1798 CB   PHE 264 5.483   17.358 47.005 1.000 9.92
ANISOU  1798 CB   PHE 264 1209    1201   1359  -78  17 9
ATOM    1799 CG   PHE 264 5.265   16.673 48.336 1.000 11.22
ANISOU  1799 CG   PHE 264 1241    1647   1374 -121  38 7 7
ATOM    1800 CD1  PHE 264 6.292   16.236 49.139 1.000 15.38
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ANISOU 1800 CD1 PHE  264 1467     2641     1734     -225  -8 873
ATOM   1801 CD2 PHE  264 3.988  16.433  48.808  1.000 16.96
ANISOU 1801 CD2 PHE  264 1425     3252     1769     -610  -79 958
ATOM   1802 CE1 PHE  264 6.090  15.596  50.336  1.000 14.52
ANISOU 1802 CE1 PHE  264 1745     2417     1354      162  334  45 2
ATOM   1803 CE2 PHE  264 3.755  15.796  50.019  1.000 18.04
ANISOU 1803 CE2 PHE  264 1747     3405     1704     -590 -109 1008
ATOM   1804 CZ  PHE  264 4.817  15.354  50.779  1.000 12.52
ANISOU 1804 CZ  PHE  264 1772     1536     1449      -57  227  3 34
ATOM   1805 C   PHE  264 6.535  19.038  45.533  1.000 8.98
ANISOU 1805 C   PHE  264 1103      919     1392      143   81 -92
ATOM   1806 O   PHE  264 5.497  19.368  44.930  1.000 9.79
ANISOU 1806 O   PHE  264 991 1190      1540       28  105    103
ATOM   1807 N   LEU  265 7.758  19.031  44.999  1.000 8.43
ANISOU 1807 N   LEU  265 992 884 1325      173 -180  158
ATOM   1808 CA  LEU  265 7.984  19.224  43.566  1.000 8.66
ANISOU 1808 CA  LEU  265 883 1066      1339       63  -33    -7 6
ATOM   1809 CB  LEU  265 9.309  19.964  43.328  1.000 10.10
ANISOU 1809 CB  LEU  265 1179     1188     1469     -225 -220 248
ATOM   1810 CG  LEU  265 9.570  20.351  41.871  1.000 9.37
ANISOU 1810 CG  LEU  265 1072     1009     1478      242   25 129
ATOM   1811 CD1 LEU  265 8.725  21.522  41.408  1.000 10.80
ANISOU 1811 CD1 LEU  265 1291     1004     1811      181 -114 296
ATOM   1812 CD2 LEU  265 11.048 20.684  41.678  1.000 10.87
ANISOU 1812 CD2 LEU  265 1129     1483     1519      134   43 146
ATOM   1813 C   LEU  265 7.933  17.849  42.875  1.000 10.21
ANISOU 1813 C   LEU  265 932 1188      1760       -6  -38   -3 02
ATOM   1814 O   LEU  265 8.858  17.043  43.042  1.000 10.45
ANISOU 1814 O   LEU  265 1388      969     1612       84 -217  107
ATOM   1815 N   ARG  266 6.853  17.530  42.135  1.000 10.00
ANISOU 1815 N   ARG  266 1325     1069     1404     -120 -222 1 5
ATOM   1816 CA  ARG  266 6.572  16.198  41.628  1.000 10.50
ANISOU 1816 CA  ARG  266 1219     1217     1554     -294  110   -2 10
ATOM   1817 CB  ARG  266 5.208  15.675  42.124  1.000 10.56
ANISOU 1817 CB  ARG  266 978 1460      1574     -168 -103   -1 05
ATOM   1818 CG  ARG  266 4.965  15.894  43.609  1.000 11.24
ANISOU 1818 CG  ARG  266 1337     1373     1563      -40  119  2 06
ATOM   1819 CD  ARG  266 3.668  15.318  44.146  1.000 11.17
ANISOU 1819 CD  ARG  266 1113     1567     1564      -17  -49   -1 1
ATOM   1820 NE  ARG  266 2.508  15.879  43.447  1.000 9.43
ANISOU 1820 NE  ARG  266 1341     1157     1086       24 -100   -1 45
ATOM   1821 CZ  ARG  266 1.236  15.509  43.657  1.000 9.83
ANISOU 1821 CZ  ARG  266 1245     1194     1294      132 -159 - 1
ATOM   1822 NH1 ARG  266 0.961  14.567  44.572  1.000 11.20
ANISOU 1822 NH1 ARG  266 1208     1240     1806     -144 -454 272
ATOM   1823 NH2 ARG  266 0.225  16.048  42.975  1.000 11.08
ANISOU 1823 NH2 ARG  266 1460     1265     1484      191 -283 7 3
ATOM   1824 C   ARG  266 6.601  16.190  40.099  1.000 10.28
ANISOU 1824 C   ARG  266 1273     1089     1545     -200   -5 -167
ATOM   1825 O   ARG  266 6.027  17.109  39.519  1.000 11.05
ANISOU 1825 O   ARG  266 1254     1153     1793     -132   47 - 6 4
ATOM   1826 N   PRO  267 7.215  15.162  39.496  1.000 10.27
ANISOU 1826 N   PRO  267 1194     1239     1468      -33  130  3 2
ATOM   1827 CD  PRO  267 7.828  13.963  40.109  1.000 12.36
ANISOU 1827 CD  PRO  267 1865     1132     1697      -26 -529 -192
ATOM   1828 CA  PRO  267 7.304  15.157  38.036  1.000 10.12
ANISOU 1828 CA  PRO  267 1278     1095     1472     -129   38 -185
ATOM   1829 CB  PRO  267 8.250  13.986  37.767  1.000 11.83
ANISOU 1829 CB  PRO  267 1489     1088     1919      -72   90 -3 22
ATOM   1830 CG  PRO  267 8.017  13.053  38.913  1.000 10.72
ANISOU 1830 CG  PRO  267 960 1356      1755       95 -257 -187
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ATOM    1831 C    PRO  267 5.977  14.929 37.344 1.000 10.86
ANISOU  1831 C    PRO  267 1330   1226    1570   -252 47 -161
ATOM    1832 O    PRO  267 5.030  14.421 37.934 1.000 12.03
ANISOU  1832 O    PRO  267 1316   1174    2080   -258 17 7 7
ATOM    1833 N    ASN  268 5.931  15.288 36.065 1.000 10.61
ANISOU  1833 N    ASN  268 1216   1146    1670   -70  -86 -129
ATOM    1834 CA   ASN  268 4.810  14.949 35.198 1.000 11.20
ANISOU  1834 CA   ASN  268 1285   1349    1622   -167 -43 -229
ATOM    1835 CB   ASN  268 4.954  15.664 33.846 1.000 14.02
ANISOU  1835 CB   ASN  268 2160   1410    1756   132  -316 2 3
ATOM    1836 CG   ASN  268 4.992  17.175 33.992 1.000 13.03
ANISOU  1836 CG   ASN  268 1811   1393    1747   189  -355 - 8 8
ATOM    1837 OD1  ASN  268 4.046  17.748 34.566 1.000 16.65
ANISOU  1837 OD1  ASN  268 1910   1744    2673   292  -1 -159
ATOM    1838 ND2  ASN  268 6.037  17.818 33.495 1.000 14.19
ANISOU  1838 ND2  ASN  268 2505   1372    1516   161  264 -172
ATOM    1839 C    ASN  268 4.705  13.446 34.968 1.000 10.88
ANISOU  1839 C    ASN  268 1294   1314    1526   -75  -226 -164
ATOM    1840 O    ASN  268 5.715  12.732 34.979 1.000 11.68
ANISOU  1840 O    ASN  268 1534   1439    1464   87 -458  -121
ATOM    1841 N    ALA  269 3.484  12.980 34.688 1.000 12.22
ANISOU  1841 N    ALA  269 1484   1428    1732   -108 -397 -427
ATOM    1842 CA   ALA  269 3.277  11.547 34.417 1.000 12.12
ANISOU  1842 CA   ALA  269 1432   1356    1819   -238 -29  -282
ATOM    1843 CB   ALA  269 1.817  11.310 34.058 1.000 12.38
ANISOU  1843 CB   ALA  269 1439   1278    1985   -228 -183 2 9
ATOM    1844 C    ALA  269 4.125  10.981 33.283 1.000 11.26
ANISOU  1844 C    ALA  269 1445   1240    1592   25 -280  -141
ATOM    1845 O    ALA  269 4.493  9.800  33.263 1.000 12.53
ANISOU  1845 O    ALA  269 1428   1249    2085   -110 108  -188
ATOM    1846 N    ASP  270 4.438  11.799 32.276 1.000 11.47
ANISOU  1846 N    ASP  270 1701   1280    1378   -261 -341 -300
ATOM    1847 CA   ASP  270 5.214  11.378 31.113 1.000 11.92
ANISOU  1847 CA   ASP  270 1826   1106    1595   19 -183  -156
ATOM    1848 CB   ASP  270 4.760  12.096 29.850 1.000 14.13
ANISOU  1848 CB   ASP  270 1733   2038    1597   84 111 2 12
ATOM    1849 CG   ASP  270 5.050  13.568 29.777 1.000 15.98
ANISOU  1849 CG   ASP  270 2309   1939    1823   418  -418 5 64
ATOM    1850 OD1  ASP  270 5.432  14.186 30.762 1.000 21.61
ANISOU  1850 OD1  ASP  270 4101   1797    2312   176  -515 163
ATOM    1851 OD2  ASP  270 4.880  14.152 28.674 1.000 24.64
ANISOU  1851 OD2  ASP  270 3995   3221    2145   -62  -169 1395
ATOM    1852 C    ASP  270 6.721  11.542 31.264 1.000 12.86
ANISOU  1852 C    ASP  270 1840   1392    1654   -398 -61  3 15
ATOM    1853 O    ASP  270 7.443  11.290 30.292 1.000 14.83
ANISOU  1853 O    ASP  270 1813   2114    1709   -346 -141 4 9
ATOM    1854 N    PHE  271 7.230  11.911 32.439 1.000 11.85
ANISOU  1854 N    PHE  271 1360   1316    1824   59 -25 7 0
ATOM    1855 CA   PHE  271 8.665  11.927 32.715 1.000 11.14
ANISOU  1855 CA   PHE  271 1242   1349    1641   10 230 1 62
ATOM    1856 CB   PHE  271 8.972  12.378 34.143 1.000 12.19
ANISOU  1856 CB   PHE  271 1467   1444    1722   -96  -3 1 82
ATOM    1857 CG   PHE  271 10.385 11.992 34.597 1.000 12.77
ANISOU  1857 CG   PHE  271 1411   1640    1800   42 31 5 6
ATOM    1858 CD1  PHE  271 11.475 12.488 33.904 1.000 13.22
ANISOU  1858 CD1  PHE  271 1513   1516    1993   168  220 4 9
ATOM    1859 CD2  PHE  271 10.624 11.155 35.666 1.000 13.55
ANISOU  1859 CD2  PHE  271 1343   1674    2131   139  84 2 55
ATOM    1860 CE1  PHE  271 12.779 12.178 34.249 1.000 14.26
ANISOU  1860 CE1  PHE  271 1432   1760    2225   -39  46 -416
ATOM    1861 CE2  PHE  271 11.925 10.806 36.019 1.000 15.88
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ANISOU 1861 CE2 PHE  271 1537      1818      2679      -263  -675 2 6 0
ATOM   1862 CZ  PHE  271 13.006    11.288    35.304    1.000 14.15
ANISOU 1862 CZ  PHE  271 1166      1736      2475      7     -531  -467
ATOM   1863 C   PHE  271 9.259     10.550    32.410    1.000 11.27
ANISOU 1863 C   PHE  271 1359      1338      1585      75 271 348
ATOM   1864 O   PHE  271 8.785     9.531     32.920    1.000 12.97
ANISOU 1864 O   PHE  271 2011      1320      1596      -85   473   2 7 9
ATOM   1865 N   THR  272 10.261    10.498    31.541    1.000 11.95
ANISOU 1865 N   THR  272 1018      1503      2020      -214  300   -115
ATOM   1866 CA  THR  272 10.823    9.254     30.992    1.000 12.70
ANISOU 1866 CA  THR  272 1615      1557      1652      132   341   1 4 6
ATOM   1867 CB  THR  272 10.679    9.281     29.450    1.000 16.79
ANISOU 1867 CB  THR  272 1814      2829      1737      -595  157   -406
ATOM   1868 OG1 THR  272 9.301     9.471     29.090    1.000 18.02
ANISOU 1868 OG1 THR  272 1912      2921      2013      -497  -73   9 1
ATOM   1869 CG2 THR  272 11.200    7.976     28.856    1.000 17.02
ANISOU 1869 CG2 THR  272 2144      2857      1467      -475  538   -194
ATOM   1870 C   THR  272 12.272    9.057     31.423    1.000 12.02
ANISOU 1870 C   THR  272 1436      1573      1559      92 603 137
ATOM   1871 O   THR  272 13.055    10.031    31.437    1.000 14.17
ANISOU 1871 O   THR  272 1451      1583      2351      125   602   4 1 2
ATOM   1872 N   PHE  273 12.625    7.837     31.828    1.000 12.34
ANISOU 1872 N   PHE  273 1402      1585      1703      17 378 1 5 8
ATOM   1873 CA  PHE  273 13.953    7.492     32.312    1.000 12.20
ANISOU 1873 CA  PHE  273 1362      1364      1909      -126  336   1 4 7
ATOM   1874 CB  PHE  273 13.951    7.514     33.861    1.000 12.37
ANISOU 1874 CB  PHE  273 1362      1447      1890      -102  211   - 8
ATOM   1875 CG  PHE  273 12.988    6.528     34.491    1.000 11.65
ANISOU 1875 CG  PHE  273 1398      1631      1396      -367  42 -2 1 5
ATOM   1876 CD1 PHE  273 11.684    6.889     34.773    1.000 14.11
ANISOU 1876 CD1 PHE  273 1531      2214      1614      -336  293   - 6 2
ATOM   1877 CD2 PHE  273 13.409    5.245     34.803    1.000 13.20
ANISOU 1877 CD2 PHE  273 2024      1639      1352      -358  339   - 9
ATOM   1878 CE1 PHE  273 10.793    5.993     35.323    1.000 13.25
ANISOU 1878 CE1 PHE  273 1536      2081      1418      -98   447   4 2
ATOM   1879 CE2 PHE  273 12.530    4.329     35.327    1.000 13.39
ANISOU 1879 CE2 PHE  273 1529      1905      1654      -224  140   2 8 3
ATOM   1880 CZ  PHE  273 11.227    4.706     35.604    1.000 14.75
ANISOU 1880 CZ  PHE  273 1444      2260      1902      -90   -186 2 7 5
ATOM   1881 C   PHE  273 14.423    6.135     31.795    1.000 12.45
ANISOU 1881 C   PHE  273 1278      1526      1927      -120  317   - 3 1
ATOM   1882 O   PHE  273 13.645    5.311     31.291    1.000 11.95
ANISOU 1882 O   PHE  273 1590      1580      1370      -137  226   - 1 3
ATOM   1883 N   SER  274 15.717    5.854     31.952    1.000 12.07
ANISOU 1883 N   SER  274 1270      1640      1677      -29   558   3 5 3
ATOM   1884 CA  SER  274 16.335    4.586     31.604    1.000 14.39
ANISOU 1884 CA  SER  274 1583      1534      2349      43 707 3 8 4
ATOM   1885 CB  SER  274 17.845    4.771     31.438    1.000 14.49
ANISOU 1885 CB  SER  274 1578      1727      2202      213   695   3 2 9
ATOM   1886 OG  SER  274 18.564    3.558     31.424    1.000 14.97
ANISOU 1886 OG  SER  274 1763      1848      2078      349   348   - 1 3
ATOM   1887 C   SER  274 16.100    3.505     32.666    1.000 13.12
ANISOU 1887 C   SER  274 1670      1481      1833      8 461 137
ATOM   1888 O   SER  274 16.438    3.700     33.834    1.000 13.50
ANISOU 1888 O   SER  274 1493      1518      2116      -65   119   1 5
ATOM   1889 N   VAL  275 15.533    2.359     32.271    1.000 11.90
ANISOU 1889 N   VAL  275 1476      1618      1427      -110  490   1 9 5
ATOM   1890 CA  VAL  275 15.283    1.254     33.180    1.000 11.41
ANISOU 1890 CA  VAL  275 1708      1424      1204      -8 286 7 6
ATOM   1891 CB  VAL  275 14.346    0.198     32.543    1.000 12.74
ANISOU 1891 CB  VAL  275 1732      1300      1809      62 164 - 1 6
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ATOM   1892 CG1 VAL    275 14.157  -1.020  33.437 1.000 16.10
ANISOU 1892 CG1 VAL    275 2352    1803    1962    -614  -663 370
ATOM   1893 CG2 VAL    275 12.961   0.763  32.261 1.000 13.81
ANISOU 1893 CG2 VAL    275 1535    1786    1924      16  363 126
ATOM   1894 C   VAL    275 16.577   0.622  33.692 1.000 12.62
ANISOU 1894 C   VAL    275 1574    1628    1594      14  375 136
ATOM   1895 O   VAL    275 16.729   0.405  34.926 1.000 13.01
ANISOU 1895 O   VAL    275 1667    1643    1634       9  118 180
ATOM   1896 N   PRO    276 17.569   0.286  32.889 1.000 14.64
ANISOU 1896 N   PRO    276 1583    2066    1914       2  454 -42
ATOM   1897 CD  PRO    276 17.583   0.285  31.415 1.000 15.84
ANISOU 1897 CD  PRO    276 1565    2536    1916      89  755 3 5
ATOM   1898 CA  PRO    276 18.827  -0.250  33.453 1.000 16.76
ANISOU 1898 CA  PRO    276 1667    2403    2296     261  393 -163
ATOM   1899 CB  PRO    276 19.732  -0.503  32.236 1.000 18.27
ANISOU 1899 CB  PRO    276 1804    2568    2571     411  574 -142
ATOM   1900 CG  PRO    276 18.863  -0.385  31.029 1.000 18.96
ANISOU 1900 CG  PRO    276 2147    2763    2293     725  694 - 37
ATOM   1901 C   PRO    276 19.500   0.710  34.420 1.000 16.32
ANISOU 1901 C   PRO    276 1521    2342    2336     115  237 6 7
ATOM   1902 O   PRO    276 20.035   0.277  35.456 1.000 16.78
ANISOU 1902 O   PRO    276 1411    2689    2275      93 376 253
ATOM   1903 N   LEU    277 19.475   2.019  34.155 1.000 16.58
ANISOU 1903 N   LEU    277 1835    2412    2052     -15  483 148
ATOM   1904 CA  LEU    277 20.142   2.919  35.099 1.000 17.70
ANISOU 1904 CA  LEU    277 1990    2226    2511     -21  362 118
ATOM   1905 CB  LEU    277 20.298   4.277  34.425 1.000 20.20
ANISOU 1905 CB  LEU    277 2952    2292    2432      -1 -14 271
ATOM   1906 CG  LEU    277 21.048   5.359  35.186 1.000 20.86
ANISOU 1906 CG  LEU    277 2213    2221    3490     -32 -355 482
ATOM   1907 CD1 LEU    277 22.446   4.888  35.531 1.000 34.24
ANISOU 1907 CD1 LEU    277 2157    2303    8552      69 -842 258
ATOM   1908 CD2 LEU    277 21.062   6.620  34.334 1.000 31.91
ANISOU 1908 CD2 LEU    277 4745    2460    4918    -474 -572 1150
ATOM   1909 C   LEU    277 19.411   2.989  36.430 1.000 16.55
ANISOU 1909 C   LEU    277 1975    1885    2430    -218  211 -243
ATOM   1910 O   LEU    277 19.997   3.116  37.517 1.000 19.19
ANISOU 1910 O   LEU    277 2179    2636    2476    -617   50 122
ATOM   1911 N   ALA    278 18.080   2.905  36.386 1.000 15.48
ANISOU 1911 N   ALA    278 2008    1904    1969    -358  279 112
ATOM   1912 CA  ALA    278 17.308   2.896  37.636 1.000 14.51
ANISOU 1912 CA  ALA    278 2109    1763    1641    -309   74 167
ATOM   1913 CB  ALA    278 15.814   2.896  37.347 1.000 15.41
ANISOU 1913 CB  ALA    278 2017    1773    2064      66  301 626
ATOM   1914 C   ALA    278 17.710   1.684  38.479 1.000 14.55
ANISOU 1914 C   ALA    278 1972    1869    1689    -195 -255 7 9
ATOM   1915 O   ALA    278 17.894   1.770  39.683 1.000 13.80
ANISOU 1915 O   ALA    278 1444    2144    1655    -250 -166 8 9
ATOM   1916 N   ARG    279 17.841   0.530  37.842 1.000 13.86
ANISOU 1916 N   ARG    279 1795    1728    1742    -432 -128 169
ATOM   1917 CA  ARG    279 18.242  -0.679  38.560 1.000 15.88
ANISOU 1917 CA  ARG    279 1995    1973    2064      59  355 411
ATOM   1918 CB  ARG    279 18.204  -1.922  37.648 1.000 16.83
ANISOU 1918 CB  ARG    279 1889    1897    2609      84  544 250
ATOM   1919 CG  ARG    279 16.790  -2.323  37.291 1.000 19.63
ANISOU 1919 CG  ARG    279 2123    2196    3139     -63  233 9 1
ATOM   1920 CD  ARG    279 16.656  -3.288  36.131 1.000 27.03
ANISOU 1920 CD  ARG    279 3924    3198    3150    -603 -275 -198
ATOM   1921 NE  ARG    279 17.236  -4.578  36.364 1.000 27.45
ANISOU 1921 NE  ARG    279 4659    2854    2915    -359  751 -789
ATOM   1922 CZ  ARG    279 16.714  -5.717  36.779 1.000 32.85
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ANISOU 1922 CZ   ARG  279 4486      3045      4948      -475  448  -222
ATOM   1923 NH1  ARG  279 15.424   -5.874    37.089    1.000 29.96
ANISOU 1923 NH1  ARG  279 4653      2168      4562      -103  967  -678
ATOM   1924 NH2  ARG  279 17.551   -6.750    36.890    1.000 37.87
ANISOU 1924 NH2  ARG  279 4879      2436      7074      -276  3273 -824
ATOM   1925 C    ARG  279 19.628   -0.519    39.150    1.000 17.48
ANISOU 1925 C    ARG  279 2118      1653      2871      75 -8 705
ATOM   1926 O    ARG  279 19.916   -1.064    40.212    1.000 26.82
ANISOU 1926 O    ARG  279 3764      3102      3325      -1987 -1467 1383
ATOM   1927 N    GLU  280 20.538    0.189    38.505    1.000 17.73
ANISOU 1927 N    GLU  280 1983      2293      2459      109  609  37
ATOM   1928 CA   GLU  280 21.899    0.317    39.026    1.000 19.66
ANISOU 1928 CA   GLU  280 2049      2023      3396      125  215  737
ATOM   1929 CB   GLU  280 22.836    0.886    37.936    1.000 20.17
ANISOU 1929 CB   GLU  280 1648      2457      3560      464  138  1099
ATOM   1930 CG   GLU  280 22.964   -0.149    36.818    1.000 31.79
ANISOU 1930 CG   GLU  280 3477      4175      4427      801  1187 -4
ATOM   1931 CD   GLU  280 23.698    0.341    35.590    1.000 39.66
ANISOU 1931 CD   GLU  280 5144      5703      4221      -64  1339 -6
ATOM   1932 OE1  GLU  280 24.466    1.327    35.685    1.000 39.65
ANISOU 1932 OE1  GLU  280 3464      5891      5710      334  574  1639
ATOM   1933 OE2  GLU  280 23.489   -0.294    34.519    1.000 41.55
ANISOU 1933 OE2  GLU  280 5257      6747      3781      2245 -184 102
ATOM   1934 C    GLU  280 21.984    1.188    40.266    1.000 19.68
ANISOU 1934 C    GLU  280 1488      2350      3640      -566  162  490
ATOM   1935 O    GLU  280 23.031    1.142    40.958    1.000 25.69
ANISOU 1935 O    GLU  280 1871      3766      4123      231  -245 180
ATOM   1936 N    CYS  281 20.943    1.980    40.565    1.000 18.57
ANISOU 1936 N    CYS  281 1560      2609      2887      -406  -211 176
ATOM   1937 CA   CYS  281 21.098    2.762    41.806    1.000 23.83
ANISOU 1937 CA   CYS  281 3222      2647      3184      -1189 176  -122
ATOM   1938 CB   CYS  281 21.079    4.264    41.523    1.000 25.40
ANISOU 1938 CB   CYS  281 3278      2655      3718      -426  368  -46
ATOM   1939 SG   CYS  281 19.587    4.904    40.763    1.000 27.05
ANISOU 1939 SG   CYS  281 3069      2914      4295      -522  -37  -794
ATOM   1940 C    CYS  281 20.098    2.406    42.907    1.000 16.99
ANISOU 1940 C    CYS  281 1377      1604      3475      109  -6 -546
ATOM   1941 O    CYS  281 19.971    3.173    43.889    1.000 17.04
ANISOU 1941 O    CYS  281 2294      1277      2902      -204  -484 -129
ATOM   1942 N    GLY  282 19.447    1.245    42.794    1.000 15.23
ANISOU 1942 N    GLY  282 1617      1597      2572      3  -58  -436
ATOM   1943 CA   GLY  282 18.731    0.674    43.914    1.000 15.61
ANISOU 1943 CA   GLY  282 1565      1973      2394      6  -331  -266
ATOM   1944 C    GLY  282 17.246    0.519    43.727    1.000 13.75
ANISOU 1944 C    GLY  282 1635      1562      2029      -270  -446 -78
ATOM   1945 O    GLY  282 16.585    0.012    44.639    1.000 14.99
ANISOU 1945 O    GLY  282 1751      1630      2313      207  -242 455
ATOM   1946 N    PHE  283 16.744    1.009    42.582    1.000 12.65
ANISOU 1946 N    PHE  283 1434      1803      1570      -200  18  -252
ATOM   1947 CA   PHE  283 15.292    0.886    42.374    1.000 11.80
ANISOU 1947 CA   PHE  283 1477      1032      1974      -15  -264 4 6
ATOM   1948 CB   PHE  283 14.839    1.890    41.295    1.000 14.13
ANISOU 1948 CB   PHE  283 2262      972  2136      109  -187  159
ATOM   1949 CG   PHE  283 14.906    3.351    41.757    1.000 12.63
ANISOU 1949 CG   PHE  283 1711      1033      2055      47 -86 9
ATOM   1950 CD1  PHE  283 13.851    3.928    42.409    1.000 13.45
ANISOU 1950 CD1  PHE  283 1697      1399      2013      -166  24  -229
ATOM   1951 CD2  PHE  283 16.037    4.111    41.519    1.000 13.15
ANISOU 1951 CD2  PHE  283 1567      1135      2295      142  -41  -99
ATOM   1952 CE1  PHE  283 13.903    5.248    42.839    1.000 15.61
ANISOU 1952 CE1  PHE  283 2111      1649      2171      -202  484  -617
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ATOM   1953 CE2 PHE  283 16.112   5.432  41.963 1.000 12.60
ANISOU 1953 CE2 PHE  283 1783    937  2068    32  -18   264
ATOM   1954 CZ  PHE  283 15.040   5.993  42.641 1.000 13.37
ANISOU 1954 CZ  PHE  283 1863    865  2352   187 -149  1 3
ATOM   1955 C   PHE  283 14.915  -0.534  41.972 1.000 11.23
ANISOU 1955 C   PHE  283 1527    974  1765    63 -172  6 5
ATOM   1956 O   PHE  283 15.471  -1.071  40.990 1.000 13.24
ANISOU 1956 O   PHE  283 1249   1428  2355   175 -120 - 361
ATOM   1957 N   ASP  284 13.998  -1.130  42.712 1.000 12.31
ANISOU 1957 N   ASP  284 1607   1333  1736  -268 -312 8 7
ATOM   1958 CA  ASP  284 13.589  -2.528  42.527 1.000 12.48
ANISOU 1958 CA  ASP  284 1725   1202  1814  -148 -543 35 0
ATOM   1959 CB  ASP  284 13.159  -3.156  43.876 1.000 12.67
ANISOU 1959 CB  ASP  284 2014   1145  1656   -50 -406 135
ATOM   1960 CG  ASP  284 13.261  -4.667  43.909 1.000 13.40
ANISOU 1960 CG  ASP  284 2077   1171  1843   110 -419 3 63
ATOM   1961 OD1 ASP  284 13.861  -5.246  42.974 1.000 14.98
ANISOU 1961 OD1 ASP  284 1956   1094  2640   -87   11 6 0
ATOM   1962 OD2 ASP  284 12.762  -5.306  44.883 1.000 15.79
ANISOU 1962 OD2 ASP  284 2494   1539  1966  -330 -446 43 8
ATOM   1963 C   ASP  284 12.478  -2.641  41.510 1.000 10.82
ANISOU 1963 C   ASP  284 1238   1387  1487  -205  -99  123
ATOM   1964 O   ASP  284 11.373  -3.100  41.777 1.000 12.28
ANISOU 1964 O   ASP  284 1331   1175  2159  -209   48 191
ATOM   1965 N   VAL  285 12.751  -2.154  40.308 1.000 11.32
ANISOU 1965 N   VAL  285 1204   1671  1426   -93  -48  6 1
ATOM   1966 CA  VAL  285 11.748  -2.062  39.260 1.000 11.45
ANISOU 1966 CA  VAL  285 1468   1384  1500    39 -219  - 15
ATOM   1967 CB  VAL  285 12.153  -1.072  38.157 1.000 11.58
ANISOU 1967 CB  VAL  285 1412   1523  1465  -388 -428 - 8
ATOM   1968 CG1 VAL  285 12.278   0.362  38.679 1.000 15.02
ANISOU 1968 CG1 VAL  285 2209   1458  2040  -264 -442 - 32
ATOM   1969 CG2 VAL  285 13.467  -1.482  37.495 1.000 15.70
ANISOU 1969 CG2 VAL  285 1909   1443  2615  -159  309  447
ATOM   1970 C   VAL  285 11.424  -3.431  38.642 1.000 10.83
ANISOU 1970 C   VAL  285 1232   1281  1602    93 -221  108
ATOM   1971 O   VAL  285 12.267  -4.301  38.520 1.000 12.13
ANISOU 1971 O   VAL  285 1214   1192  2202   -28  300  162
ATOM   1972 N   SER  286 10.168  -3.523  38.248 1.000 11.09
ANISOU 1972 N   SER  286 1116   1608  1489   -76   96 7
ATOM   1973 CA  SER  286  9.558  -4.622  37.510 1.000 11.32
ANISOU 1973 CA  SER  286 1104   1479  1718   -41 -274 252
ATOM   1974 CB  SER  286  8.483  -5.292  38.344 1.000 9.88
ANISOU 1974 CB  SER  286 1328   1141  1285    72 -207  7 0
ATOM   1975 OG  SER  286  7.570  -4.361  38.905 1.000 11.34
ANISOU 1975 OG  SER  286 1391   1188  1729   147 -153 7 5
ATOM   1976 C   SER  286  9.019  -4.106  36.175 1.000 10.34
ANISOU 1976 C   SER  286 1127   1227  1575    28  -87 245
ATOM   1977 O   SER  286  7.829  -4.112  35.869 1.000 12.62
ANISOU 1977 O   SER  286 1223   2219  1353     0 -178  228
ATOM   1978 N   LEU  287  9.926  -3.622  35.335 1.000 12.45
ANISOU 1978 N   LEU  287 1414   1664  1653  -212    3  161
ATOM   1979 CA  LEU  287  9.654  -2.900  34.099 1.000 12.59
ANISOU 1979 CA  LEU  287 1622   1558  1605  -366   94 184
ATOM   1980 CB  LEU  287 10.145  -1.452  34.210 1.000 12.91
ANISOU 1980 CB  LEU  287 1716   1591  1597  -373  -95  2 7
ATOM   1981 CG  LEU  287  9.452  -0.590  35.264 1.000 12.96
ANISOU 1981 CG  LEU  287 1182   1848  1895  -407  -51  - 170
ATOM   1982 CD1 LEU  287 10.229   0.708  35.484 1.000 13.34
ANISOU 1982 CD1 LEU  287 1644   1108  2318   -38 -124 223
ATOM   1983 CD2 LEU  287  8.006  -0.248  34.914 1.000 14.56
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ANISOU 1983 CD2 LEU   287 1716    1548    2267    36 -550  3 1 8
ATOM   1984 C   LEU   287 10.319  -3.610  32.928  1.000 12.63
ANISOU 1984 C   LEU   287 1837    1244    1719   -233  248  3 5 4
ATOM   1985 O   LEU   287 11.529  -3.805  32.916  1.000 16.68
ANISOU 1985 O   LEU   287 1779    1998    2560   -292  390  -1 4 9
ATOM   1986 N   ASP   288 9.531   -4.045  31.950  1.000 13.91
ANISOU 1986 N   ASP   288 2080    1751    1455     4  223  2 2 7
ATOM   1987 CA  ASP   288 10.079  -4.688  30.759  1.000 15.50
ANISOU 1987 CA  ASP   288 2029    2269    1593   -122  605  1 5 3
ATOM   1988 CB  ASP   288 8.979   -5.478  30.043  1.000 17.00
ANISOU 1988 CB  ASP   288 2722    2125    1613   -250  362  - 2
ATOM   1989 CG  ASP   288 9.480   -6.452  29.014  1.000 19.30
ANISOU 1989 CG  ASP   288 2467    2980    1885    173  243  - 3 7 7
ATOM   1990 OD1 ASP   288 10.447  -7.183  29.292  1.000 25.95
ANISOU 1990 OD1 ASP   288 2812    3190    3856    501  -239 -7 8 3
ATOM   1991 OD2 ASP   288 8.911   -6.508  27.907  1.000 31.76
ANISOU 1991 OD2 ASP   288 5375    4430    2260   1266  -849 -1 1 5 4
ATOM   1992 C   ASP   288 10.654  -3.652  29.811  1.000 17.08
ANISOU 1992 C   ASP   288 2259    2631    1602   -263  248  5 3 4
ATOM   1993 O   ASP   288 10.197  -2.502  29.708  1.000 23.31
ANISOU 1993 O   ASP   288 4276    2268    2313   -244  -13  2 9 7
ATOM   1994 N   GLY   289 11.702  -3.966  29.049  1.000 21.26
ANISOU 1994 N   GLY   289 2748    3699    1632   -610  752  5 1 1
ATOM   1995 CA  GLY   289 12.116  -2.880  28.152  1.000 21.65
ANISOU 1995 CA  GLY   289 2842    3988    1396  -1163 71 6 2 6
ATOM   1996 C   GLY   289 13.084  -1.859  28.736  1.000 22.09
ANISOU 1996 C   GLY   289 2888    3509    1996   -738  -23  2 4 3
ATOM   1997 O   GLY   289 13.414  -1.836  29.924  1.000 20.34
ANISOU 1997 O   GLY   289 3230    2606    1891   -918  124  1 4 7
ATOM   1998 N   GLU   290 13.562  -0.952  27.869  1.000 16.48
ANISOU 1998 N   GLU   290 2665    2099    1496     5  222  -4 4 5
ATOM   1999 CA  GLU   290 14.716  -0.117  28.182  1.000 16.94
ANISOU 1999 CA  GLU   290 2470    2161    1806    81 411 - 4 8 4
ATOM   2000 CB  GLU   290 15.579  0.012   26.912  1.000 20.26
ANISOU 2000 CB  GLU   290 2670    2740    2287    414  863  - 2 3 9
ATOM   2001 CG  GLU   290 16.071  -1.333  26.386  1.000 24.53
ANISOU 2001 CG  GLU   290 3251    3153    2916    664  1218 -6 1 2
ATOM   2002 CD  GLU   290 16.812  -2.170  27.411  1.000 27.91
ANISOU 2002 CD  GLU   290 3019    3161    4424    989  940  - 2 5 1
ATOM   2003 OE1 GLU   290 17.874  -1.747  27.917  1.000 35.13
ANISOU 2003 OE1 GLU   290 3913    4458    4975    963  -85  - 8 7 7
ATOM   2004 OE2 GLU   290 16.336  -3.280  27.734  1.000 43.76
ANISOU 2004 OE2 GLU   290 6893    3257    6478   -30  -748 5 9 8
ATOM   2005 C   GLU   290 14.406  1.271   28.716  1.000 14.67
ANISOU 2005 C   GLU   290 2512    1756    1308    95 142 1 0
ATOM   2006 O   GLU   290 15.260  1.840   29.412  1.000 15.25
ANISOU 2006 O   GLU   290 2074    1969    1750    50 418 - 2 6 2
ATOM   2007 N   THR   291 13.232  1.814   28.437  1.000 15.72
ANISOU 2007 N   THR   291 2173    2393    1406    78 346 - 5 1 9
ATOM   2008 CA  THR   291 12.792  3.087   28.991  1.000 15.16
ANISOU 2008 CA  THR   291 2080    1845    1833   -88  631  - 1 5
ATOM   2009 CB  THR   291 12.766  4.226   27.956  1.000 18.67
ANISOU 2009 CB  THR   291 2724    2529    1842   -361  769  3 3 6
ATOM   2010 OG1 THR   291 11.756  4.009   26.976  1.000 22.93
ANISOU 2010 OG1 THR   291 3313    3135    2265    445   78 1 4 6
ATOM   2011 CG2 THR   291 14.096  4.306   27.213  1.000 21.82
ANISOU 2011 CG2 THR   291 3035    2126    3130    357  1450 9 0 2
ATOM   2012 C   THR   291 11.402  2.920   29.622  1.000 12.86
ANISOU 2012 C   THR   291 1863    1604    1421    47 305 2 1 9
ATOM   2013 O   THR   291 10.625  2.024   29.270  1.000 16.13
ANISOU 2013 O   THR   291 2344    1983    1804   -303  750  - 4 3 1
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ATOM    2014 N    ALA   292 11.037  3.791  30.542 1.000 12.41
ANISOU  2014 N    ALA   292 1495   1363   1859   -2 256  7 7
ATOM    2015 CA   ALA   292 9.746   3.839  31.202 1.000 11.57
ANISOU  2015 CA   ALA   292 1362   1257   1779   -213 153  3 7
ATOM    2016 CB   ALA   292 9.718   2.954  32.439 1.000 12.62
ANISOU  2016 CB   ALA   292 1768   1245   1784   100  357  4
ATOM    2017 C    ALA   292 9.385   5.255  31.614 1.000 10.32
ANISOU  2017 C    ALA   292 1317   1335   1270   -181 99 5 4
ATOM    2018 O    ALA   292 10.266  6.134  31.701 1.000 10.97
ANISOU  2018 O    ALA   292 1389   1138   1641   -146 279 1 0 4
ATOM    2019 N    THR   293 8.091   5.445  31.882 1.000 12.32
ANISOU  2019 N    THR   293 1486   1547   1647   -314 563  -2 8 4
ATOM    2020 CA   THR   293 7.626   6.715  32.421 1.000 12.28
ANISOU  2020 CA   THR   293 1717   1460   1489   -168 337  -2 0 0
ATOM    2021 CB   THR   293 6.352   7.215  31.733 1.000 13.27
ANISOU  2021 CB   THR   293 2128   1182   1730   -258 -159 -2 8 4
ATOM    2022 OG1  THR   293 5.317   6.237  31.911 1.000 13.85
ANISOU  2022 OG1  THR   293 1831   1217   2216   8  -131  7 4
ATOM    2023 CG2  THR   293 6.474   7.303  30.212 1.000 13.72
ANISOU  2023 CG2  THR   293 1791   1683   1738   -252 -56  -4 0 5
ATOM    2024 C    THR   293 7.363   6.635  33.937 1.000 10.58
ANISOU  2024 C    THR   293 1439   1050   1533   12 447 9
ATOM    2025 O    THR   293 7.211   5.576  34.553 1.000 10.29
ANISOU  2025 O    THR   293 1049   1102   1758   -56  93 1 1 8
ATOM    2026 N    PHE   294 7.243   7.810  34.569 1.000 11.53
ANISOU  2026 N    PHE   294 1794   1093   1494   -307 306  - 6 6
ATOM    2027 CA   PHE   294 6.806   7.939  35.950 1.000 10.41
ANISOU  2027 CA   PHE   294 1432   1061   1463   -174 125  -1 6 2
ATOM    2028 CB   PHE   294 6.709   9.426  36.336 1.000 12.25
ANISOU  2028 CB   PHE   294 1930   1030   1694   -164 292  - 6 4
ATOM    2029 CG   PHE   294 6.270   9.658  37.770 1.000 12.77
ANISOU  2029 CG   PHE   294 1880   1136   1837   -103 178  -4 2 7
ATOM    2030 CD1  PHE   294 7.123   9.462  38.839 1.000 14.73
ANISOU  2030 CD1  PHE   294 1976   1893   1727   -539 161  -1 3 2
ATOM    2031 CD2  PHE   294 4.989  10.068  38.056 1.000 16.59
ANISOU  2031 CD2  PHE   294 2180   1923   2199   348  386  -4 9 2
ATOM    2032 CE1  PHE   294 6.726   9.673  40.144 1.000 14.36
ANISOU  2032 CE1  PHE   294 1598   2028   1830   -505 280  -1 1 8
ATOM    2033 CE2  PHE   294 4.575  10.275  39.345 1.000 16.75
ANISOU  2033 CE2  PHE   294 2214   2062   2087   692  144  - 6 0 2
ATOM    2034 CZ   PHE   294 5.426  10.065  40.413 1.000 15.17
ANISOU  2034 CZ   PHE   294 2040   1426   2296   327  97 -1 3 5
ATOM    2035 C    PHE   294 5.484   7.195  36.172 1.000 10.89
ANISOU  2035 C    PHE   294 1401   1200   1536   -155 78 1 3 7
ATOM    2036 O    PHE   294 5.325   6.425  37.125 1.000 10.67
ANISOU  2036 O    PHE   294 1396   1297   1360   90 337 1 0 5
ATOM    2037 N    GLN   295 4.487   7.355  35.299 1.000 10.62
ANISOU  2037 N    GLN   295 1399   1187   1450   -18  88 - 2 4
ATOM    2038 CA   GLN   295 3.217   6.612  35.393 1.000 11.31
ANISOU  2038 CA   GLN   295 1433   1205   1660   -96  120  -3 2 1
ATOM    2039 CB   GLN   295 2.284   7.053  34.254 1.000 11.66
ANISOU  2039 CB   GLN   295 1425   1053   1953   -25  63 -1 4 1
ATOM    2040 CG   GLN   295 0.951   6.360  34.200 1.000 11.05
ANISOU  2040 CG   GLN   295 1573   1011   1614   -93  -118 1 8
ATOM    2041 CD   GLN   295 0.052   6.843  33.087 1.000 11.35
ANISOU  2041 CD   GLN   295 1592   1326   1395   173  57 - 1 3
ATOM    2042 OE1  GLN   295 0.349   7.823  32.378 1.000 15.06
ANISOU  2042 OE1  GLN   295 2306   1589   1825   110  7 3 7 9
ATOM    2043 NE2  GLN   295 -1.053  6.153  32.914 1.000 13.90
ANISOU  2043 NE2  GLN   295 1511   1757   2015   156  -282 2 0 8
ATOM    2044 C    GLN   295 3.412   5.107  35.389 1.000 10.12
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ANISOU 2044  C    GLN  295 1154      1203      1486      21 160 -1 9 1
ATOM   2045  O    GLN  295 2.827     4.309     36.128    1.000 11.82
ANISOU 2045  O    GLN  295 1264      1542      1686      -107  41 1 3 7
ATOM   2046  N    ASP  296 4.267     4.558     34.538    1.000 9.35
ANISOU 2046  N    ASP  296 1076      1056      1422      -118  -75  -2 7 5
ATOM   2047  CA   ASP  296 4.655     3.172     34.416    1.000 9.91
ANISOU 2047  CA   ASP  296 1241      1139      1387      56 60  -2 4 3
ATOM   2048  CB   ASP  296 5.699     2.852     33.347    1.000 10.26
ANISOU 2048  CB   ASP  296 1315      1156      1429      113   132  - 3 6
ATOM   2049  CG   ASP  296 5.343     2.981     31.885    1.000 11.42
ANISOU 2049  CG   ASP  296 1357      1578      1405      358   121  -1 9 9
ATOM   2050  OD1  ASP  296 4.143     2.904     31.531    1.000 13.82
ANISOU 2050  OD1  ASP  296 1511      1744      1997      149   -209 - 6 2
ATOM   2051  OD2  ASP  296 6.282     3.151     31.047    1.000 13.48
ANISOU 2051  OD2  ASP  296 1802      1758      1564      228   364  7 3
ATOM   2052  C    ASP  296 5.175     2.682     35.770    1.000 10.31
ANISOU 2052  C    ASP  296 1416      1141      1361      16 91 -1 9 8
ATOM   2053  O    ASP  296 4.852     1.551     36.197    1.000 11.40
ANISOU 2053  O    ASP  296 1428      1452      1453      -288  32 3 5
ATOM   2054  N    TRP  297 6.004     3.484     36.441    1.000 10.88
ANISOU 2054  N    TRP  297 1752      1144      1238      -161  11 5 5
ATOM   2055  CA   TRP  297 6.646     3.104     37.685    1.000 11.26
ANISOU 2055  CA   TRP  297 1768      1215      1294      -217  -57  4 5
ATOM   2056  CB   TRP  297 7.899     3.999     37.890    1.000 10.31
ANISOU 2056  CB   TRP  297 1387      1417      1112      -87   213  1 2 0
ATOM   2057  CG   TRP  297 8.621     3.651     39.172    1.000 10.98
ANISOU 2057  CG   TRP  297 1456      1394      1324      164   -29  - 4 3
ATOM   2058  CD2  TRP  297 9.082     4.534     40.202    1.000 12.49
ANISOU 2058  CD2  TRP  297 1255      1729      1761      75 -298  -1 9 7
ATOM   2059  CE2  TRP  297 9.692     3.755     41.201    1.000 16.08
ANISOU 2059  CE2  TRP  297 1860      2049      2202      -294  -977 4 9
ATOM   2060  CE3  TRP  297 9.040     5.910     40.379    1.000 17.41
ANISOU 2060  CE3  TRP  297 2778      1740      2096      -388  -916 - 2 3 4
ATOM   2061  CD1  TRP  297 8.969     2.400     39.589    1.000 13.58
ANISOU 2061  CD1  TRP  297 1617      1518      2025      0  -664  1 1 4
ATOM   2062  NE1  TRP  297 9.614     2.444     40.808    1.000 16.12
ANISOU 2062  NE1  TRP  297 2165      1909      2051      -22   -873 2 2 0
ATOM   2063  CZ2  TRP  297 10.243    4.320     42.341    1.000 19.85
ANISOU 2063  CZ2  TRP  297 2756      2383      2404      -951  -1337 2 6 7
ATOM   2064  CZ3  TRP  297 9.586     6.466     41.515    1.000 23.40
ANISOU 2064  CZ3  TRP  297 4215      2030      2645      -1001 -1757 - 7 7
ATOM   2065  CH2  TRP  297 10.181    5.670     42.486    1.000 21.51
ANISOU 2065  CH2  TRP  297 3178      2457      2537      -910  -1473 - 5 1
ATOM   2066  C    TRP  297 5.700     3.138     38.882    1.000 10.39
ANISOU 2066  C    TRP  297 1172      1448      1329      -280  -237 3 9 1
ATOM   2067  O    TRP  297 5.574     2.159     39.639    1.000 13.52
ANISOU 2067  O    TRP  297 1748      1830      1557      32 -91 7 0 3
ATOM   2068  N    ILE  298 5.033     4.272     39.079    1.000 12.08
ANISOU 2068  N    ILE  298 1400      1710      1480      -49   83 4 5 1
ATOM   2069  CA   ILE  298 4.223     4.521     40.272    1.000 13.43
ANISOU 2069  CA   ILE  298 1301      2484      1317      -199  -158 - 3 3
ATOM   2070  CB   ILE  298 4.370     5.988     40.689    1.000 16.97
ANISOU 2070  CB   ILE  298 1877      2908      1661      -1000 214  - 6 3 0
ATOM   2071  CG2  ILE  298 3.538     6.423     41.876    1.000 22.01
ANISOU 2071  CG2  ILE  298 3980      3121      1263      -233  545  - 3 3 9
ATOM   2072  CG1  ILE  298 5.847     6.253     41.037    1.000 27.10
ANISOU 2072  CG1  ILE  298 2588      5151      2557      -2140 -708 9 7
ATOM   2073  CD1  ILE  298 6.365     5.522     42.266    1.000 43.13
ANISOU 2073  CD1  ILE  298 5185      8299      2904      -3717 -3055 7 0 8
ATOM   2074  C    ILE  298 2.772     4.116     40.131    1.000 10.94
ANISOU 2074  C    ILE  298 1350      1652      1156      -165  -79  9 6
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ATOM    2075  O    ILE   298  2.137    3.844    41.155  1.000 12.67
ANISOU  2075  O    ILE   298  1689    1634     1493   -102  212   3 52
ATOM    2076  N    GLY   299  2.267    4.077    38.897  1.000 10.14
ANISOU  2076  N    GLY   299  1412    1057     1384    -51  -377 2 01
ATOM    2077  CA   GLY   299  0.866    3.822    38.695  1.000 10.72
ANISOU  2077  CA   GLY   299  1335    1084     1655     0   -229  -2 06
ATOM    2078  C    GLY   299  0.049    5.054    38.369  1.000 12.05
ANISOU  2078  C    GLY   299  1422    1293     1864    105   -292 0
ATOM    2079  O    GLY   299  0.585    6.088    37.976  1.000 13.11
ANISOU  2079  O    GLY   299  1917    1199     1866    174    80 - 23
ATOM    2080  N    GLY   300 -1.268    4.931    38.490  1.000 13.92
ANISOU  2080  N    GLY   300  1393    1531     2363    182   -410 -2 23
ATOM    2081  CA   GLY   300 -2.237    5.932    38.087  1.000 14.02
ANISOU  2081  CA   GLY   300  1524    1471     2331    217   -563 - 3 36
ATOM    2082  C    GLY   300 -2.587    7.015    39.074  1.000 11.97
ANISOU  2082  C    GLY   300  940 1603       2004     67   -488 - 295
ATOM    2083  O    GLY   300 -3.322    7.950    38.722  1.000 10.90
ANISOU  2083  O    GLY   300  1219    1408     1515    -37   -203 -1 34
ATOM    2084  N    ASN   301 -2.090    6.910    40.285  1.000 11.64
ANISOU  2084  N    ASN   301  948 1557       1917   -383   -327  165
ATOM    2085  CA   ASN   301 -2.195    7.915    41.323  1.000 13.39
ANISOU  2085  CA   ASN   301  1626    1904     1557   -191   -403 183
ATOM    2086  CB   ASN   301 -3.047    7.301    42.427  1.000 17.60
ANISOU  2086  CB   ASN   301  1391    2869     2426    -9 326  228
ATOM    2087  CG   ASN   301 -4.021    8.196    43.108  1.000 19.15
ANISOU  2087  CG   ASN   301  2549    2827     1900    805    59 3 77
ATOM    2088  OD1  ASN   301 -5.072    8.606    42.591  1.000 15.47
ANISOU  2088  OD1  ASN   301  1258    2340     2280   -253   339 - 8
ATOM    2089  ND2  ASN   301 -3.661    8.510    44.367  1.000 29.28
ANISOU  2089  ND2  ASN   301  3585    4783     2758   1521   -850 -8 85
ATOM    2090  C    ASN   301 -0.862    8.331    41.914  1.000 11.31
ANISOU  2090  C    ASN   301  1436    1669     1194    1    1   -168
ATOM    2091  O    ASN   301 -0.033    7.456    42.221  1.000 12.03
ANISOU  2091  O    ASN   301  1483    1548     1542   -151   -279 8 2
ATOM    2092  N    TYR   302 -0.634    9.628    42.133  1.000 11.53
ANISOU  2092  N    TYR   302  1186    1584     1611    -61    26 1 02
ATOM    2093  CA   TYR   302  0.573   10.046    42.838  1.000 11.90
ANISOU  2093  CA   TYR   302  1260    1395     1865     5   -212  2 25
ATOM    2094  CB   TYR   302  0.657   11.589    43.036  1.000 13.14
ANISOU  2094  CB   TYR   302  1768    1404     1820   -273   190  1 81
ATOM    2095  CG   TYR   302  1.082   12.287    41.750  1.000 10.88
ANISOU  2095  CG   TYR   302  1395    1347     1393   -321    2   -153
ATOM    2096  CD1  TYR   302  2.421   12.439    41.413  1.000 11.29
ANISOU  2096  CD1  TYR   302  1385    1246     1659    -58    98 - 46
ATOM    2097  CE1  TYR   302  2.859   13.075    40.248  1.000 10.60
ANISOU  2097  CE1  TYR   302  1055    1241     1732    -11    52 - 1
ATOM    2098  CD2  TYR   302  0.161   12.793    40.858  1.000 11.30
ANISOU  2098  CD2  TYR   302  1304    1332     1656   -145   105  - 26
ATOM    2099  CE2  TYR   302  0.573   13.406    39.690  1.000 11.72
ANISOU  2099  CE2  TYR   302  1013    1733     1708   -288   -138 161
ATOM    2100  CZ   TYR   302  1.907   13.551    39.375  1.000 10.35
ANISOU  2100  CZ   TYR   302  1009    1214     1709   -229   -50  - 19
ATOM    2101  OH   TYR   302  2.284   14.153    38.202  1.000 11.82
ANISOU  2101  OH   TYR   302  1192    1532     1766    -8 102  1 04
ATOM    2102  C    TYR   302  0.654    9.349    44.196  1.000 12.45
ANISOU  2102  C    TYR   302  1517    1450     1765   -181   -202 217
ATOM    2103  O    TYR   302 -0.375    9.230    44.878  1.000 13.55
ANISOU  2103  O    TYR   302  1464    1925     1759   -339   -211 7
ATOM    2104  N    VAL   303  1.868    8.967    44.542  1.000 12.06
ANISOU  2104  N    VAL   303  1517    1653     1413   -135   -3 3 40
ATOM    2105  CA   VAL   303  2.309    8.430    45.820  1.000 11.88
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ANISOU 2105  CA  VAL   303 1434      1609      1471      -368  -197 2 2 3
ATOM   2106  CB  VAL   303 2.755     6.967    45.736    1.000 14.57
ANISOU 2106  CB  VAL   303 1395      1682      2459      -217  -918 3 1 2
ATOM   2107  CG1 VAL   303 3.131     6.462    47.132    1.000 17.33
ANISOU 2107  CG1 VAL   303 2644      1608      2331       -48 -1114 6 1
ATOM   2108  CG2 VAL   303 1.703     6.041    45.122    1.000 14.80
ANISOU 2108  CG2 VAL   303 1876      1676      2069      -592  -639 3 2 2
ATOM   2109  C   VAL   303 3.467     9.328    46.303    1.000 13.88
ANISOU 2109  C   VAL   303 870 1791      2613        75  -286  - 375
ATOM   2110  O   VAL   303 4.526     9.417    45.681    1.000 19.70
ANISOU 2110  O   VAL   303 1064      2307      4114       -61   323  -999
ATOM   2111  N   ASN   304 3.271    10.046    47.393    1.000 13.77
ANISOU 2111  N   ASN   304 1681      1815      1737      -479  -388 1 4 0
ATOM   2112  CA  ASN   304 4.205    11.077    47.828    1.000 13.37
ANISOU 2112  CA  ASN   304 1626      1240      2212      -213  -533 2 7 9
ATOM   2113  CB  ASN   304 3.460    12.223    48.566    1.000 13.24
ANISOU 2113  CB  ASN   304 1206      1454      2370      -243  -344 2 9 6
ATOM   2114  CG  ASN   304 2.457    12.922    47.667    1.000 14.16
ANISOU 2114  CG  ASN   304 1142      2326      1910       146   -88 2 3 0
ATOM   2115  OD1 ASN   304 2.776    13.283    46.540    1.000 16.65
ANISOU 2115  OD1 ASN   304 1408      2456      2464       107   185 9 1 6
ATOM   2116  ND2 ASN   304 1.263    13.126    48.209    1.000 17.45
ANISOU 2116  ND2 ASN   304 1414      2961      2257       545   181 3 1 5
ATOM   2117  C   ASN   304 5.325    10.588    48.728    1.000 11.18
ANISOU 2117  C   ASN   304 1382      1299      1566      -183  -163 1 1 2
ATOM   2118  O   ASN   304 6.396    11.232    48.699    1.000 12.07
ANISOU 2118  O   ASN   304 1325      1382      1879      -167   -66  - 59
ATOM   2119  N   ILE   305 5.092     9.541    49.516    1.000 12.56
ANISOU 2119  N   ILE   305 1791      1296      1685      -152  -232 2 0 2
ATOM   2120  CA  ILE   305 6.063     9.011    50.463    1.000 14.01
ANISOU 2120  CA  ILE   305 2314      1393      1614       -55  -479 7 9
ATOM   2121  CB  ILE   305 5.781     9.493    51.906    1.000 14.44
ANISOU 2121  CB  ILE   305 2223      1604      1659       -29  -217 1 5 7
ATOM   2122  CG2 ILE   305 5.725    11.017    51.956    1.000 15.31
ANISOU 2122  CG2 ILE   305 1768      1608      2441        43  -479  - 3 1 4
ATOM   2123  CG1 ILE   305 4.543     8.853    52.498    1.000 14.83
ANISOU 2123  CG1 ILE   305 1779      1694      2163        27  -307  - 1 5 3
ATOM   2124  CD1 ILE   305 4.163     9.252    53.900    1.000 28.68
ANISOU 2124  CD1 ILE   305 3788      5324      1786     -1491   381 9 2
ATOM   2125  C   ILE   305 6.059     7.487    50.389    1.000 12.79
ANISOU 2125  C   ILE   305 1703      1355      1800      -260  -586 2 3 1
ATOM   2126  O   ILE   305 5.111     6.864    49.897    1.000 15.63
ANISOU 2126  O   ILE   305 1779      1564      2597      -185 -1008 2 7 7
ATOM   2127  N   ARG   306 7.170     6.896    50.829    1.000 13.04
ANISOU 2127  N   ARG   306 1618      1389      1946      -368  -598 3 8 3
ATOM   2128  CA  ARG   306 7.340     5.435    50.868    1.000 11.82
ANISOU 2128  CA  ARG   306 1352      1366      1773      -375  -154 4 4 4
ATOM   2129  CB  ARG   306 8.111     4.965    49.640    1.000 15.28
ANISOU 2129  CB  ARG   306 1976      1941      1886      -368   -19 1 1 1
ATOM   2130  CG  ARG   306 8.203     3.472    49.395    1.000 17.16
ANISOU 2130  CG  ARG   306 2566      1953      2001       -68   -68 7 6
ATOM   2131  CD  ARG   306 8.344     3.075    47.937    1.000 19.51
ANISOU 2131  CD  ARG   306 2921      2361      2130      -397  -396 - 3 0 2
ATOM   2132  NE  ARG   306 7.078     3.198    47.212    1.000 20.65
ANISOU 2132  NE  ARG   306 2693      2844      2309     -1056  -310 2 1 4
ATOM   2133  CZ  ARG   306 6.948     3.186    45.893    1.000 17.11
ANISOU 2133  CZ  ARG   306 2006      2225      2268        45   -91 5 9 6
ATOM   2134  NH1 ARG   306 8.013     3.065    45.083    1.000 21.58
ANISOU 2134  NH1 ARG   306 2405      2677      3116      -232   381  - 669
ATOM   2135  NH2 ARG   306 5.734     3.301    45.365    1.000 17.51
ANISOU 2135  NH2 ARG   306 2235      1550      2868       150  -484 - 162
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ATOM    2136 C    ARG  306  8.035  5.027 52.155 1.000 13.45
ANISOU  2136 C    ARG  306  2254  1018  1837  -246  -481 9 8
ATOM    2137 O    ARG  306  9.006  5.682 52.556 1.000 12.15
ANISOU  2137 O    ARG  306  1902  1099  1615   -18  -362 - 80
ATOM    2138 N    ARG  307  7.571  3.968 52.811 1.000 18.19
ANISOU  2138 N    ARG  307  3073  1620  2218  -734  -938 792
ATOM    2139 CA   ARG  307  8.197  3.380 53.989 1.000 19.20
ANISOU  2139 CA   ARG  307  3053  1963  2277  -675 -1236 6 43
ATOM    2140 C    ARG  307  9.086  2.191 53.611 1.000 23.08
ANISOU  2140 C    ARG  307  4018  1905  2847  -270 -1885 329
ATOM    2141 O    ARG  307  8.636  1.292 52.895 1.000 35.93
ANISOU  2141 O    ARG  307  6003  2403  5244    38 -3227 -791
ATOM    2142 CB   ARG  307  7.131  2.918 54.997 1.000 28.25
ANISOU  2142 CB   ARG  307  5557  3297  1882 -1503  -277 509
ATOM    2143 CG   ARG  307  6.032  3.921 55.275 1.000 33.39
ANISOU  2143 CG   ARG  307  4564  4859  3261 -1613  731  208
ATOM    2144 CD   ARG  307  5.022  3.523 56.317 1.000 40.42
ANISOU  2144 CD   ARG  307  6335  5701  3322 -1900 1263 971
ATOM    2145 NE   ARG  307  5.605  2.952 57.529 1.000 50.83
ANISOU  2145 NE   ARG  307  8119  7287  3908 -2786  105  1624
ATOM    2146 CZ   ARG  307  4.894  2.441 58.530 1.000 51.36
ANISOU  2146 CZ   ARG  307  7424  8064  4025 -3650 -966 2451
ATOM    2147 NH1  ARG  307  3.567  2.422 58.485 1.000 69.51
ANISOU  2147 NH1  ARG  307  7586 10951  7874 -6970 -2008 3245
ATOM    2148 NH2  ARG  307  5.489  1.937 59.600 1.000 59.99
ANISOU  2148 NH2  ARG  307 10714  8150  3930 -5986 -3291 2028
ATOM    2149 N    THR  308 10.347  2.147 54.048 1.000 22.92
ANISOU  2149 N    THR  308  2759  2587  3364  -589  -200 170
ATOM    2150 CA   THR  308 11.215  1.009 53.794 1.000 24.47
ANISOU  2150 CA   THR  308  3382  2649  3268  -360   52 150
ATOM    2151 C    THR  308 10.602 -0.252 54.382 1.000 31.10
ANISOU  2151 C    THR  308  5251  2520  4044  -768   16 279
ATOM    2152 O    THR  308 10.610 -1.292 53.718 1.000 31.44
ANISOU  2152 O    THR  308  4573  2676  4696  -457 -1745 - 40
ATOM    2153 CB   THR  308 12.615  1.279 54.378 1.000 23.51
ANISOU  2153 CB   THR  308  3718  2086  3131   413  -694 5 42
ATOM    2154 OG1  THR  308 13.195  2.410 53.705 1.000 23.61
ANISOU  2154 OG1  THR  308  2711  2503  3754   153  437  - 9
ATOM    2155 CG2  THR  308 13.573  0.141 54.117 1.000 26.37
ANISOU  2155 CG2  THR  308  4427  2796  2796   927  -329 - 18
ATOM    2156 N    SER  309 10.066 -0.156 55.596 1.000 28.39
ANISOU  2156 N    SER  309  3759  2774  4252   -19    2  1300
ATOM    2157 CA   SER  309  9.488 -1.335 56.238 1.000 34.69
ANISOU  2157 CA   SER  309  6110  3146  3925 -1066 -1089 1626
ATOM    2158 C    SER  309  8.109 -1.737 55.724 1.000 41.41
ANISOU  2158 C    SER  309  6442  3910  5383 -2171 -1170 2144
ATOM    2159 O    SER  309  7.672 -2.884 55.952 1.000 57.05
ANISOU  2159 O    SER  309 11389  5141  5146 -4907 -2077 2027
ATOM    2160 CB   SER  309  9.450 -1.104 57.755 1.000 31.61
ANISOU  2160 CB   SER  309  4863  2958  4188  -483  368 9 62
ATOM    2161 OG   SER  309  8.485 -0.135 58.107 1.000 38.99
ANISOU  2161 OG   SER  309  4731  3477  6604   313 -2249 - 496
ATOM    2162 N    LYS  310  7.391 -0.868 55.032 1.000 47.69
ANISOU  2162 N    LYS  310  5502  5577  7040  -539 -1369 1583
ATOM    2163 FE   IUM  312  8.574 13.466 54.055 1.000 11.05
ANISOU  2163 FE   IUM  312  1690  1156  1351  -101  -237 7 1
ATOM    2164 C1   AKG  313  5.987 14.815 54.612 1.000 19.65
ANISOU  2164 C1   AKG  313  2777  2119  2572   258  -117 556
ATOM    2165 O1   AKG  313  4.799 15.240 54.659 1.000 20.82
ANISOU  2165 O1   AKG  313  2957  2293  2659   514  -234 264
ATOM    2166 O2   AKG  313  6.643 14.144 53.787 1.000 17.79
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ANISOU 2166 O2   AKG  313 2407      1765      2587      74 -377   4 2 9
ATOM   2157 C2   AKG  313 6.867     15.178    55.844    1.000 20.0 8
ANISOU 2167 C2   AKG  313 1997      2566      3068      -528  419  - 3 9 9
ATOM   2168 O5   AKG  313 7.982     14.661    55.821    1.000 17.60
ANISOU 2168 O5   AKG  313 2289      2066      2334      -314  226  - 2 5 2
ATOM   2169 C3   AKG  313 6.272     16.080    56.872    1.000 21.69
ANISOU 2169 C3   AKG  313 2751      1910      3581      240   62 - 327
ATOM   2170 C4   AKG  313 7.318     16.741    57.716    1.000 21.50
ANISOU 2170 C4   AKG  313 3246      1761      3160      199   -143 - 1 8 5
ATOM   2171 C5   AKG  313 6.923     17.816    58.672    1.000 22.58
ANISOU 2171 C5   AKG  313 3122      1840      3618      755   -495 - 3 1 3
ATOM   2172 O3   AKG  313 7.754     18.591    59.124    1.000 27.48
ANISOU 2172 O3   AKG  313 3581      2470      4389      -34   602  - 1 2 6 6
ATOM   2173 O4   AKG  313 5.660     17.889    58.999    1.000 28.55
ANISOU 2173 O4   AKG  313 3191      2809      4846      612   -246 - 1 1 4 8
ATOM   2174 S    SO4  401 11.676    0.439     24.942    1.000 40.14
ATOM   2175 O1   SO4  401 11.293    0.826     26.321    1.000 33.12
ATOM   2176 O2   SO4  401 12.501    -0.829    25.014    1.000 35.79
ATOM   2177 O3   SO4  401 10.430    0.189     24.129    1.000 54.89
ATOM   2178 O4   SO4  401 12.500    1.520     24.329    1.000 44.80
ATOM   2179 OW   HOH  501 -6.455    10.219    44.319    1.000 14.29
ATOM   2180 OW   HOH  502 -10.520   18.612    50.560    1.000 12.86
ATOM   2181 OW   HOH  503 -8.644    16.907    47.858    1.000 16.83
ATOM   2182 OW   HOH  504 -10.313   20.800    43.074    1.000 16.10
ATOM   2183 OW   HOH  505 -6.051    19.199    52.602    1.000 16.38
ATOM   2184 OW   HOH  506 -6.873    24.642    47.100    1.000 20.55
ATOM   2185 OW   HOH  507 10.676    -4.179    46.406    1.000 27.41
ATOM   2186 OW   HOH  508 -0.077    21.786    40.872    1.000 15.22
ATOM   2187 OW   HOH  509 5.761     13.656    46.041    1.000 17.40
ATOM   2188 OW   HOH  510 29.135    31.449    51.982    1.000 18.40
ATOM   2189 OW   HOH  511 26.032    32.724    52.741    1.000 17.03
ATOM   2190 OW   HOH  512 10.965    32.371    46.000    1.000 16.70
ATOM   2191 OW   HOH  513 23.871    24.457    58.649    1.000 18.71
ATOM   2192 OW   HOH  514 26.353    29.063    50.326    1.000 18.96
ATOM   2193 OW   HOH  515 23.191    33.106    53.153    1.000 20.41
ATOM   2194 OW   HOH  516 21.429    11.721    55.329    1.000 18.39
ATOM   2195 OW   HOH  517 9.122     15.567    53.585    1.000 24.87
ATOM   2196 OW   HOH  518 27.843    17.352    53.437    1.000 27.76
ATOM   2197 OW   HOH  519 -14.415   20.029    44.444    1.000 23.47
ATOM   2198 OW   HOH  520 15.253    33.050    51.771    1.000 27.20
ATOM   2199 OW   HOH  521 14.080    31.486    44.302    1.000 21.58
ATOM   2200 OW   HOH  522 17.770    33.842    53.596    1.000 23.56
ATOM   2201 OW   HOH  523 3.671     24.673    36.173    1.000 20.95
ATOM   2202 OW   HOH  524 -15.683   28.618    52.535    1.000 24.05
ATOM   2203 OW   HOH  525 -5.386    20.413    39.013    1.000 26.85
ATOM   2204 OW   HOH  526 10.417    27.949    58.778    1.000 28.33
ATOM   2205 OW   HOH  527 23.165    19.592    62.202    1.000 29.36
ATOM   2206 OW   HOH  528 23.736    10.550    55.737    1.000 24.02
ATOM   2207 OW   HOH  529 -1.662    28.650    42.485    1.000 21.62
ATOM   2208 OW   HOH  530 -4.689    10.177    46.511    1.000 31.65
ATOM   2209 OW   HOH  531 1.545     35.657    50.866    1.000 19.59
ATOM   2210 OW   HOH  532 0.980     22.687    36.818    1.000 30.57
ATOM   2211 OW   HOH  533 -12.450   16.848    56.071    1.000 28.42
ATOM   2212 OW   HOH  534 -9.418    16.139    51.364    1.000 22.60
ATOM   2213 OW   HOH  535 32.711    25.816    43.116    1.000 31.44
ATOM   2214 OW   HOH  536 27.068    24.587    55.468    1.000 23.32
ATOM   2215 OW   HOH  537 13.523    11.832    51.199    1.000 10.73
ATOM   2216 OW   HOH  538 8.513     16.158    35.074    1.000 12.26
ATOM   2217 OW   HOH  539 0.922     2.590     35.058    1.000 14.79
ATOM   2218 OW   HOH  540 -1.548    3.709     34.484    1.000 14.25
ATOM   2219 OW   HOH  541 11.711    16.898    30.416    1.000 17.84
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ATOM   2220 OW  HOH  542  15.389   11.536   32.065  1.000 17.88
ATOM   2221 OW  HOH  543  18.496   6.995    52.191  1.000 17.47
ATOM   2222 OW  HOH  544  19.848   22.580   35.334  1.000 17.28
ATOM   2223 OW  HOH  545  -0.387   4.787    41.967  1.000 13.22
ATOM   2224 OW  HOH  546  23.502   12.662   35.308  1.000 18.14
ATOM   2225 OW  HOH  547  10.332   25.236   33.926  1.000 19.05
ATOM   2226 OW  HOH  548  21.447   20.605   34.090  1.000 17.24
ATOM   2227 OW  HOH  549  8.164    7.685    27.077  1.000 25.40
ATOM   2228 OW  HOH  550  14.393   -5.127   40.321  1.000 15.88
ATOM   2229 OW  HOH  551  12.873   29.356   39.662  1.000 16.45
ATOM   2230 OW  HOH  552  11.974   24.144   58.426  1.000 19.71
ATOM   2231 OW  HOH  553  17.521   7.949    33.182  1.000 17.90
ATOM   2232 OW  HOH  554  3.401    2.691    43.340  1.000 23.76
ATOM   2233 OW  HOH  555  18.669   28.057   40.079  1.000 18.44
ATOM   2234 OW  HOH  556  10.827   12.928   30.017  1.000 19.57
ATOM   2235 OW  HOH  557  20.630   16.270   66.466  1.000 20.84
ATOM   2236 OW  HOH  558  11.315   20.266   64.044  1.000 21.62
ATOM   2237 OW  HOH  559  26.277   14.516   43.946  1.000 16.22
ATOM   2238 OW  HOH  560  9.616    15.488   32.365  1.000 19.40
ATOM   2239 OW  HOH  561  8.888    4.903    27.857  1.000 22.74
ATOM   2240 OW  HOH  562  20.496   -1.851   42.511  1.000 22.98
ATOM   2241 OW  HOH  563  17.033   29.415   38.332  1.000 26.36
ATOM   2242 OW  HOH  564  18.595   6.141    37.697  1.000 25.10
ATOM   2243 OW  HOH  565  22.446   13.893   31.420  1.000 29.00
ATOM   2244 OW  HOH  566  6.586    3.577    28.350  1.000 27.82
ATOM   2245 OW  HOH  567  6.250    20.077   30.961  1.000 23.27
ATOM   2246 OW  HOH  568  7.341    16.113   31.186  1.000 28.59
ATOM   2247 OW  HOH  569  16.090   32.070   42.552  1.000 33.08
ATOM   2248 OW  HOH  570  11.500   28.806   37.258  1.000 25.17
ATOM   2249 OW  HOH  571  12.901   26.768   58.591  1.000 28.58
ATOM   2250 OW  HOH  572  -17.071  17.043   50.450  1.000 28.82
ATOM   2251 OW  HOH  573  25.262   7.705    37.199  1.000 39.05
ATOM   2252 OW  HOH  574  32.884   26.440   51.734  1.000 29.03
ATOM   2253 OW  HOH  575  -1.199   19.088   42.527  1.000 14.86
ATOM   2254 OW  HOH  576  -4.389   33.026   63.392  1.000 29.56
ATOM   2255 OW  HOH  577  17.569   25.732   32.249  1.000 20.62
ATOM   2256 OW  HOH  578  -19.107  12.822   67.516  1.000 22.35
ATOM   2257 OW  HOH  579  29.333   19.198   51.975  1.000 22.51
ATOM   2258 OW  HOH  580  27.950   27.635   51.903  1.000 25.40
ATOM   2259 OW  HOH  581  -21.085  14.501   68.535  1.000 21.19
ATOM   2260 OW  HOH  582  1.529    17.378   33.953  1.000 25.29
ATOM   2261 OW  HOH  583  9.138    20.887   66.894  1.000 33.92
ATOM   2262 OW  HOH  584  -11.896  19.091   44.780  1.000 17.48
ATOM   2263 OW  HOH  585  6.382    12.597   43.347  1.000 22.09
ATOM   2264 OW  HOH  586  17.762   21.268   29.046  1.000 20.79
ATOM   2265 OW  HOH  587  -11.500  25.438   41.729  1.000 29.68
ATOM   2266 OW  HOH  588  7.877    1.046    29.689  1.000 27.70
ATOM   2267 OW  HOH  589  27.985   13.540   42.235  1.000 25.91
ATOM   2268 OW  HOH  590  1.276    14.852   34.021  1.000 20.41
ATOM   2269 OW  HOH  591  24.622   24.179   41.242  1.000 26.77
ATOM   2270 OW  HOH  592  0.404    14.096   36.006  1.000 27.92
ATOM   2271 OW  HOH  593  -2.835   36.981   57.827  1.000 31.86
ATOM   2272 OW  HOH  594  3.276    0.788    39.940  1.000 32.07
ATOM   2273 OW  HOH  595  11.025   -8.794   31.468  1.000 27.18
ATOM   2274 OW  HOH  596  6.301    2.276    42.639  1.000 29.74
ATOM   2275 OW  HOH  597  29.302   16.146   62.924  1.000 43.75
ATOM   2276 OW  HOH  598  19.039   20.964   67.011  1.000 30.85
ATOM   2277 OW  HOH  599  8.380    22.088   64.518  1.000 42.62
ATOM   2278 OW  HOH  600  21.480   10.826   34.742  1.000 25.74
ATOM   2279 OW  HOH  601  -2.907   21.956   38.566  1.000 30.92
ATOM   2280 OW  HOH  602  -3.928   29.841   43.352  1.000 43.96
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ATOM   2281 OW   HOH   603  2.885    21.563   34.437  1.000 33.10
ATOM   2282 OW   HOH   604  11.801   6.043    25.270  1.000 38.18
ATOM   2283 OW   HOH   605  -1.019   17.197   40.472  1.000 18.48
ATOM   2284 OW   HOH   606  18.382   23.349   68.110  1.000 22.54
ATOM   2285 OW   HOH   607  -8.141   8.137    45.609  1.000 17.64
ATOM   2286 OW   HOH   608  5.022    2.667    51.700  1.000 24.29
ATOM   2287 OW   HOH   609  17.557   10.755   33.490  1.000 21.94
ATOM   2288 OW   HOH   610  11.222   1.201    49.675  1.000 20.61
ATOM   2289 OW   HOH   611  4.243    35.047   50.509  1.000 22.18
ATOM   2290 OW   HOH   612  11.103   4.031    56.082  1.000 22.08
ATOM   2291 OW   HOH   613  11.366   31.522   36.791  1.000 32.32
ATOM   2292 OW   HOH   614  -21.189  24.787   52.739  1.000 31.83
ATOM   2293 OW   HOH   615  7.847    -1.491   30.674  1.000 24.77
ATOM   2294 OW   HOH   616  19.041   11.937   31.445  1.000 25.97
ATOM   2295 OW   HOH   617  6.221    29.879   40.410  1.000 29.24
ATOM   2296 OW   HOH   618  17.266   5.933    35.280  1.000 23.72
ATOM   2297 OW   HOH   619  5.983    -7.215   28.510  1.000 28.19
ATOM   2298 OW   HOH   620  22.574   8.129    57.639  1.000 30.97
ATOM   2299 OW   HOH   621  2.553    7.806    60.287  1.000 28.77
ATOM   2300 OW   HOH   622  29.939   25.812   51.234  1.000 34.00
ATOM   2301 OW   HOH   623  2.205    34.823   53.632  1.000 25.88
ATOM   2302 OW   HOH   624  18.091   13.838   67.343  1.000 28.46
ATOM   2303 OW   HOH   625  8.342    3.195    58.475  1.000 26.84
ATOM   2304 OW   HOH   626  -16.086  18.427   42.790  1.000 31.11
ATOM   2305 OW   HOH   627  -2.098   13.445   35.620  1.000 27.48
ATOM   2306 OW   HOH   628  0.481    30.471   42.834  1.000 32.55
ATOM   2307 OW   HOH   629  13.368   33.845   42.899  1.000 28.70
ATOM   2308 OW   HOH   630  -13.792  14.642   51.533  1.000 25.58
ATOM   2309 OW   HOH   631  3.299    1.461    29.242  1.000 39.62
ATOM   2310 OW   HOH   632  -16.012  20.690   46.705  1.000 27.75
ATOM   2311 OW   HOH   633  19.606   8.142    31.259  1.000 27.02
ATOM   2312 OW   HOH   634  5.077    7.954    57.205  1.000 30.59
ATOM   2313 OW   HOH   635  -1.502   6.963    45.877  1.000 35.68
ATOM   2314 OW   HOH   636  9.974    17.449   38.804  1.000 21.84
ATOM   2315 OW   HOH   637  -22.829  12.836   67.228  1.000 25.04
ATOM   2316 OW   HOH   638  6.275    34.333   39.722  1.000 25.88
ATOM   2317 OW   HOH   639  2.248    19.798   56.051  1.000 26.67
ATOM   2318 OW   HOH   640  -20.552  17.013   67.454  1.000 31.34
ATOM   2319 OW   HOH   641  9.298    16.570   28.911  1.000 29.96
ATOM   2320 OW   HOH   642  -1.732   11.113   60.074  1.000 28.13
ATOM   2321 OW   HOH   643  34.157   23.604   44.657  1.000 36.36
ATOM   2322 OW   HOH   644  24.298   20.199   33.576  1.000 34.90
ATOM   2323 OW   HOH   645  13.803   -4.667   31.570  1.000 32.66
ATOM   2324 OW   HOH   646  6.295    -2.594   29.009  1.000 34.61
ATOM   2325 OW   HOH   647  5.623    37.039   49.318  1.000 28.08
ATOM   2326 OW   HOH   648  -18.805  19.286   46.868  1.000 38.32
ATOM   2327 OW   HOH   649  16.026   35.829   49.382  1.000 34.45
ATOM   2328 OW   HOH   650  -12.187  28.769   45.330  1.000 27.36
ATOM   2329 OW   HOH   651  21.344   5.778    55.101  1.000 27.43
ATOM   2330 OW   HOH   652  -1.848   2.125    32.240  1.000 32.02
ATOM   2331 OW   HOH   653  -14.568  18.811   55.775  1.000 29.95
ATOM   2332 OW   HOH   654  -8.655   26.254   38.301  1.000 32.07
ATOM   2333 OW   HOH   655  18.836   13.542   28.102  1.000 32.24
ATOM   2334 OW   HOH   656  16.217   14.669   25.619  1.000 33.35
ATOM   2335 OW   HOH   657  28.678   14.477   38.043  1.000 30.94
ATOM   2336 OW   HOH   658  -11.834  15.408   53.330  1.000 33.25
ATOM   2337 OW   HOH   659  -1.317   38.273   59.599  1.000 34.45
ATOM   2338 OW   HOH   660  8.784    13.918   28.681  1.000 33.62
ATOM   2339 OW   HOH   661  -3.058   14.508   47.405  1.000 28.79
ATOM   2340 OW   HOH   662  10.968   33.651   38.533  1.000 36.21
ATOM   2341 OW   HOH   663  28.960   21.602   53.665  1.000 29.25
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ATOM   2342 OW   HOH   664 -10.709 26.808  39.175  1.000 42.71
ATOM   2343 OW   HOH   665 17.790  7.093   55.023  1.000 30.29
ATOM   2344 OW   HOH   666 6.404   24.865  29.848  1.000 34.55
ATOM   2345 OW   HOH   667 -15.418 19.777  58.341  1.000 33.82
ATOM   2346 OW   HOH   668 0.000   0.000   37.259  0.330 49.90
ATOM   2347 OW   HOH   669 19.652  24.610  33.660  1.000 31.77
ATOM   2348 OW   HOH   670 17.188  9.619   29.950  1.000 29.94
ATOM   2349 OW   HOH   671 17.708  2.958   28.338  1.000 34.94
ATOM   2350 OW   HOH   672 -0.059  3.652   30.079  1.000 32.23
ATOM   2351 OW   HOH   673 29.037  20.923  56.153  1.000 28.52
ATOM   2352 OW   HOH   674 -15.435 31.088  53.795  1.000 35.61
ATOM   2353 OW   HOH   675 -12.846 21.220  61.856  1.000 38.79
ATOM   2354 OW   HOH   676 10.299  39.666  49.554  1.000 40.30
ATOM   2355 OW   HOH   677 -5.921  28.822  41.521  1.000 34.01
ATOM   2356 OW   HOH   678 6.029   39.991  46.094  1.000 42.69
ATOM   2357 OW   HOH   679 35.052  23.156  52.356  1.000 40.17
ATOM   2358 OW   HOH   680 -12.008 38.355  51.601  1.000 35.18
ATOM   2359 OW   HOH   681 3.061   13.047  53.152  1.000 35.17
ATOM   2360 OW   HOH   682 1.379   2.075   27.532  1.000 46.38
ATOM   2361 OW   HOH   683 -0.516  -2.480  37.686  1.000 21.77
ATOM   2362 OW   HOH   684 4.567   10.310  43.503  1.000 24.86
ATOM   2363 OW   HOH   685 19.443  5.558   61.133  1.000 36.06
ATOM   2364 OW   HOH   686 3.205   29.499  40.656  1.000 36.99
ATOM   2365 OW   HOH   687 32.498  16.774  43.447  1.000 41.18
ATOM   2366 OW   HOH   688 28.166  23.113  57.593  1.000 35.56
ATOM   2367 OW   HOH   689 -17.023 23.220  46.759  1.000 30.05
ATOM   2368 OW   HOH   690 15.567  7.782   28.910  1.000 32.51
ATOM   2369 OW   HOH   691 11.780  30.287  57.203  1.000 33.34
ATOM   2370 OW   HOH   692 24.449  12.699  32.400  1.000 34.99
ATOM   2371 OW   HOH   693 26.200  25.005  57.918  1.000 39.38
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CLAIMS

5   1.   Deacetoxycephalosporin C synthase (DAOCS) having a
structure designated by the X-ray co-ordinates of structure A or structure B
herein.

2.   DAOCS in the form of a complex with a metal, e.g. iron or
10   lead, and optionally in the presence of a substrate and/or a substrate
analogue or inhibitor, having a structure designated by the X-ray
co-ordinates herein.

3.   DAOCS as claimed in claim 2, wherein the substrate is
15   penicillin N, penicillin G, 2-oxoglutarate or dioxygen, and the inhibitor is
selected from N-oxalylamino acids, pyridine-carboxylates and nitrous
oxide.

4.   Use of the three-dimensional structure of DAOCS for the
20   modification of DAOCS or other related 2-oxoglutarate dependent enzyme.

5.   Use as claimed in claim 4, wherein the related 2-oxoglutarate
dependent enzyme is DACS, DAOC/DACS or the oxygenase enzyme
involved in the introduction of the 7α-methoxy group into cephamycin C.

25

6.   Use as claimed in claim 5 for the modification of DAOCS,
DACS or DAOC/DACS such that they accept unnatural substrates more
efficiently than the wild type enzymes.

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7.   Use as claimed in claim 5 for the modification of DAOCS, DACS, DAOC/DACS such that they convert natural substrates to pharmaceuticals or useful intermediates in the preparation of pharmaceuticals.

5

8.   Use as claimed in claim 6 wherein the unnatural substrates are penicillins including penicillin G, penicillin V, 6-aminopenicillanic acid, amoxycillin, or penicillins with a phenyl glycine or p-hydroxyphenyl glycine side chain.

10

9.   Use as claimed in claim 6 wherein the unnatural substrate is a cephalosporin.

10.   Use as claimed in claim 6 wherein the unnatural substrate is
15   an amino acid, including the proteinogenic amino acids, or a peptide.

11.   Use as claimed in any one of claims 6-8, wherein penicillin G, penicillin V, another unnatural substrate or penicillin N is converted to a cephalosporin or exomethylene cephalosporin.

20

12.   An enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the side chain binding site of penicillin N or DAOC is modified and at at least one of the following sites at least one amino acid residue is changed to another amino acid residue or is deleted:
25   Thr72, Arg74, Arg75, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301, Tyr302, Val303, Asn304; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

30

13.   An enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the penicillin/cephalosporin binding site of penicillin N or DAOC is modified and at least one of the following amino acid residues is changed or deleted: Ile88, Arg160, Arg162, Phe164, Met180, Thr190, Ile192, Phe225, Pro241, Val245, Val262, Phe264, Ile305, Arg306, Arg307; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

14.   An enzyme according to claim 12 or claim 13 which is a mutant of DAOCS or DACS or DAOC/DACS.

15.   An enzyme as claimed in any one of claims 12-14, wherein both the side chain and the penicillin/cephalosporin binding sites of penicillin N or DAOC are modified and at least one of the residues specified in claims 12 and 13 is changed or deleted.

16.   An enzyme as claimed in any one of claims 12-15, wherein two or more complementary mutations are introduced to create or delete a binding interaction, including H-bonds, electrostatic, or hydrophobic interactions.

17.   A gene encoding for the enzyme of any one of claims 12-16.

18.   A micro-organism capable of expressing the gene of claim 17 under fermentation conditions.

19.   Use of micro-organisms of claim 18 for the production of beta-lactams of the penicillin or cephalosporin (including cepham) families.

20.   Use as claimed in claim 19 wherein the micro-organism contains another modified enzyme of the penicillin and cephalosporin biosynthesis pathway including isopenicillin N synthase, amidohydrolase/acetyltransferase, or L-delta-(aminoadipoyl)-L-cysteine-D-valine (ACV) synthetase.

21.   A method which comprises using the three-dimensional structure of DAOCS for determining or predicting the structure of another related 2-oxoglutarate dependent enzyme or related enzyme not from the penicillin and cephalosporin biosynthesis pathway, and using the structural information so obtained for modifying the other enzyme or for designing an inhibitor for the other enzyme.

22.   A method as claimed in claim 21 wherein the said other related 2-oxoglutarate dependent enzyme or related enzyme is 1-aminocylopropane-1-carboxylate oxidase, gibberellin C-20 oxidase, flavone synthase, flavanone 3β-hydroxylase, hyoscyamine 6β-hydroxylase, prolyl 4-hydroxylase, prolyl 3-hydroxylase, aspartyl hydroxylase, lysyl hydroxylase, proline hydroxylases, γ-butyrobetaine hydroxylase, enzymes in herbicide resistance mechanisms, clavaminate synthase, an oxygenase enzyme involved in the biosynthesis of carbapenems, the so called ethylene forming enzyme from *Pseudomonas syringe*, p-hydroxyphenylpyruvate dioxygenase, and an oxygenase enzyme involved in the oxidation of phytol in human liver peroxisomes.

23.   A method as claimed in claim 21 or 22, wherein the said other enzyme is modified, by deletion or addition or alteration; at one or more of the sites defined in claim 12 or claim 13; or using the following information for the design or an inhibitor: Asp185, His183 and His243 act as ligands to the iron; Arg258 and Ser260 and the Fe bind the

2-oxoglutarate; Met180, Phe225, Leu31 and Val245 are close to the iron
binding site; Tyr33, Arg160, Arg162, Phe164, Ile192, Gln194, Leu204,
Leu223, Leu215 are important for the construction of the part of the active
site binding 2-oxoglutarate; and Arg160 and Arg162 are important for

5   binding an amino acid or peptide derived substrate.

24.   A method as claimed in any one of claims 21-23, wherein the
said other enzyme is prolyl 4-hydroxylase, prolyl 3-hydroxylase, aspartyl
hydroxylase, or lysyl hydroxylase and the inhibitor is to be used for the

10   treatment of human diseases including fibrotic diseases including liver
cirrhosis and arthritis.

25.   A method as claimed in any one of claims 21-23, wherein the
said other enzyme is p-hydroxyphenylpyruvate dioxygenase and the

15   inhibitor is to be used in the treatment of certain genetic disorders.

26.   A method as claimed in any one of claims 21-23, wherein the
said other enzyme is involved in herbicide resistance and the information is
to be used to design new herbicides to overcome the problem of

20   resistance.

Fig.1.

LAA=L- δ -(α -aminoadipoyl)

DAA=D- δ -(α -aminoadipoyl)
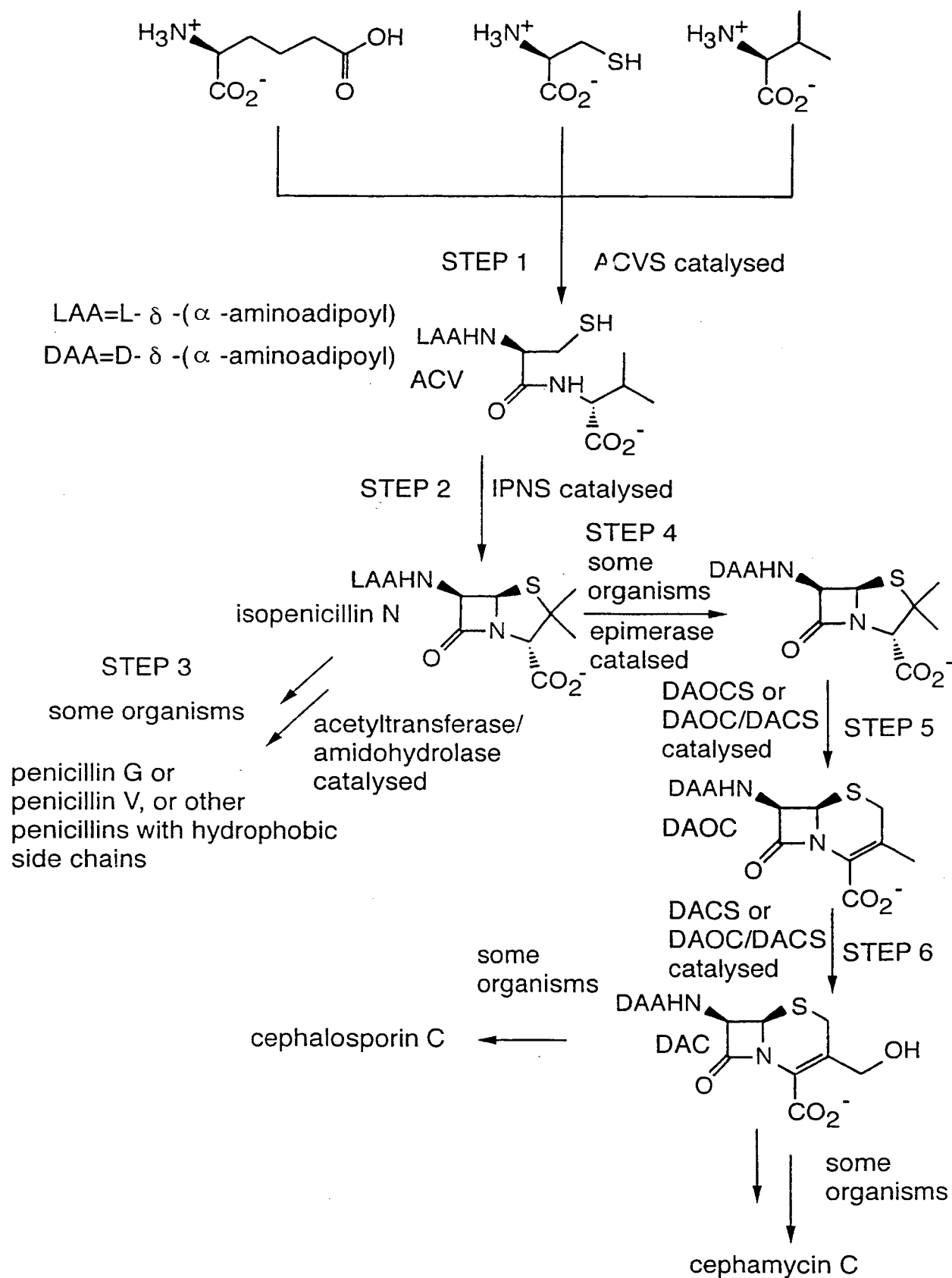
Fig.2.
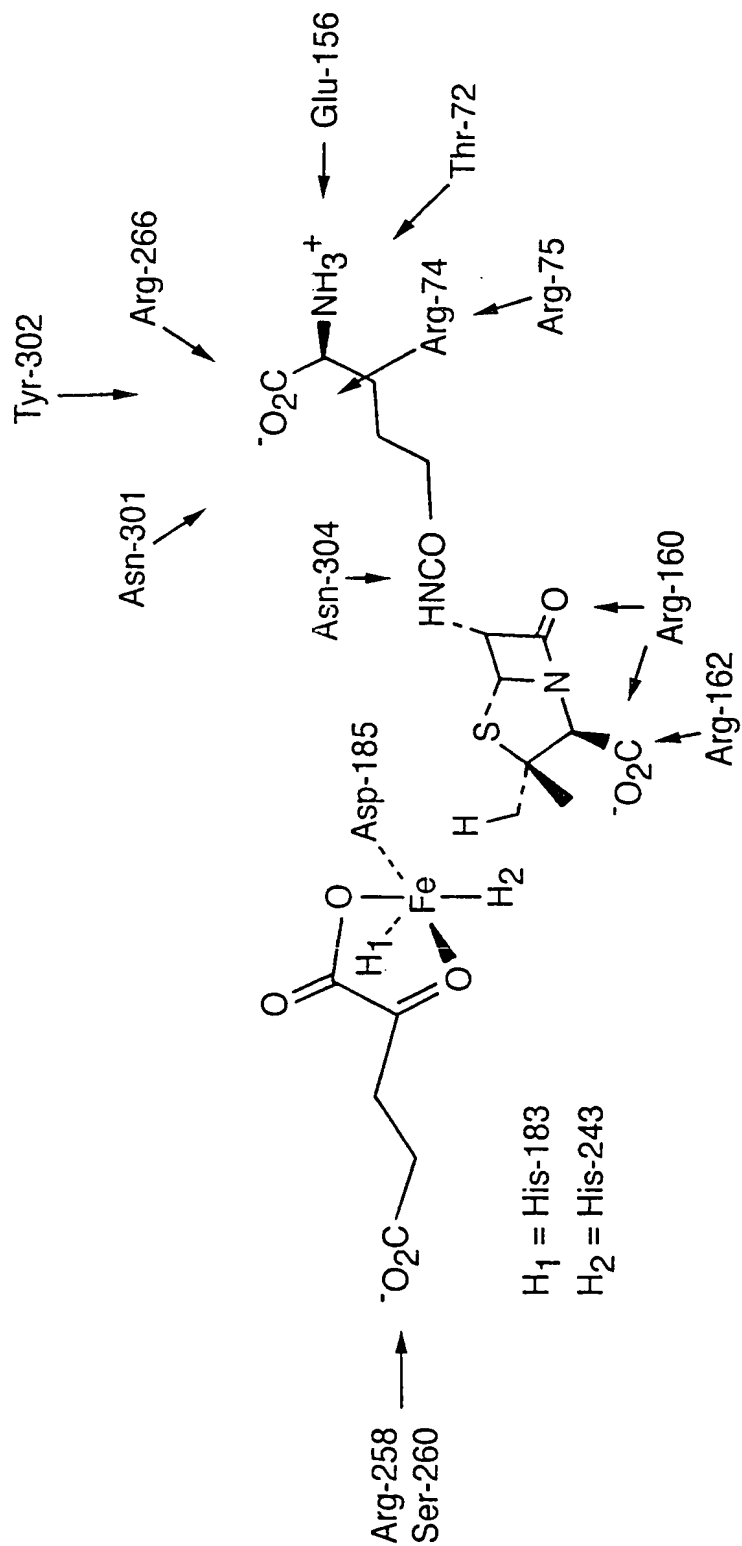
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6   C12N15/52   C12N9/00   C12P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6   C12N   C12P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CORTES, JESUS ET AL: "Purification and characterization of a 2-oxoglutarate-linked ATP-independent deacetoxycephalosporin C synthase of Streptomyces lactamdurans" J. GEN. MICROBIOL. (1987), 133(11), 3165-74 CODEN: JGMIAN;ISSN: 0022-1287, 1987, XP000035085	1
Y	see the whole document	2,3, 21-26

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| X | Further documents are listed in the continuation of box C. | | X | Patent family members are listed in annex. |

Date of the actual completion of the international search	Date of mailing of the international search report
15 March 1999	26/03/1999

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Hix, R

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INTERNATIONAL SEARCH REPORT

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document. with indication,where appropriate. of the relevant passages	Relevant to claim No.
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Y	see the whole document	2,3, 21-26

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Inte, .onal Application No

PCT/GB 98/03860

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
P,X	VALEGARD, KARIN ET AL: "Structure of a cephalosporin synthase" NATURE (LONDON) (1998), 394(6695), 805-809 CODEN: NATUAS;ISSN: 0028-0836,1998, XP002095826 see the whole document	1-11, 21-26
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Y	ROACH P L ET AL: "CRYSTAL STRUCTURE OF ISOPENICILLIN N SYNTHASE IS THE FIRST FROM A NEW STRUCTURAL FAMILY OF ENZYMES" NATURE, vol. 375, no. 6533, 22 June 1995, pages 700-704, XP002059796 cited in the application see the whole document	2,3, 21-26
Y	SCOTT R A ET AL: "X-RAY ABSORPTION SPECTROSCOPIC STUDIES OF THE HIGH-SPIN IRON(II) ACTIVE SITE OF ISOPENICILLIN N SYNTHASE: EVIDENCE FOR FE-S INTERACTION IN THE ENZYME-SUBSTRATE COMPLEX" BIOCHEMISTRY, vol. 31, no. 19, 1992, pages 4596-4601, XP002067783 see the whole document	2,3, 21-26
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